

**VIRGINIA ROANOKE RIVER BASIN ADVISORY COMMITTEE MEETING MINUTES**  
**Library of Virginia, Richmond**  
**January 25, 2008**

**Attendance:** VRRBAC members Senator Frank Ruff, Ann Austin, U.S. Representative Virgil Goode's 5<sup>th</sup> District Office, Reed Charlton, Robert Conner, John Feild, Haywood Hamlet, Bob Jean, Mike McEvoy, Tim Pace, Charles Poindexter, and Mark Wagner; **State Agencies:** DEQ: Greg Anderson; Jason Hill, Scott Kudlas, Rick Linker, and Terry Wagner; DCR: Moira Croghan and Dean Gall.

**Call to Order:**

Vice - Chairman McEvoy called the meeting to order. John Feild asked, before we get started I wanted to ask everybody's permission to record what is going on today. I'm going to be interviewed by a newspaper tomorrow and I want to be accurate in what I was relaying to them so, if nobody takes offense, I'm just going to cut this on. We are being recorded anyway for the minutes so this is just duplication. You will not be put on the spot or used adversely. No one objected to the recording.

**Welcome and Recognition of Members and Visitors:**

Vice – Chairman McEvoy Mike McEvoy welcomed everyone to the January 2008 meeting of the Virginia Roanoke River Basin Advisory Committee. Charles Poindexter, Chairman, is unavailable this morning. I think he's going to stop by for a little while if his schedule permits. He has a new day job and that's kind of keeping him busy especially this time of year. So he asked me to chair the meeting today and I'd like to call the meeting to order. Since we have a number of new faces and new members and guests in the audience maybe we could start off by going around the room and have everyone introduce their selves. Others not listed above that were present included Bill Lindenmuth and Vernon Wilson of the Lake Gaston Association.

**Membership Terms and Officers:**

- Mike said he had had a request by John Feild to add another agenda item. John Feild indicated he had a concern he wanted to express while Senator Ruff was present. I think it'd be appropriate to bring it to the fore. As you know from our initial inception our authorizing legislation indicated that we were limited to 3 consecutive 2-year terms and then we would have to go off of the Board. That means all of the old hands will be going off probably within the next year or year and a half but at one fell swoop including the designees to the Bi-State Commission. It might be beneficial if we are going to remain in existence and have a viable role in the deliberations on matters affecting the Basin that the original authorizing legislation is re-visited to allow for staggered replacement of some of the old hands. I am not campaigning to serve a longer term personally, but I think for the good of this Committee the institutional knowledge needs to be transitioned out so that the new members can pick up the ball and we don't start with a blank slate come about a year from now. So, that is of concern and of course we also need to look at the Chairman's position because Charles having been duly anointed as a new Delegate may become an ex-officio member and I don't know if that precludes him from serving as Chair, but he definitely will have a number of other irons in the fire which will probably serve as a distraction so we need to probably look at filling the Chair and the Vice-Chair positions which are currently vacant. And that probably needs to be done as soon as we can because of the importance of the number of issues that are going to be coming up in the next few months. Thank you. **Mike said John, maybe under Committee Reports we can talk about a nominating committee to find some new officers. He then asked if anybody else have additions to the agenda?**
- Bob Conner stated I don't know if this is going to come under additional item on the agenda, maybe we can work it in the Committee Report, Mr. Chairman. I too am one of the first members

- on this Committee and we have discussed many things and nothing has ever been put in concrete or nothing has been agreed too, or legislation come before the General Assembly to accept or decline what our recommendations may be. So I think if we are going to continue to be a viable Committee, whoever's on this down the road, that some attention needs to be addressed to this. I know Frank and Tom have been very active in doing what they can do, but I sometimes feel like we are spinning our wheels over the years and we've never met with NC. So I'll just stop at that and we need to discuss this a little further in our meeting today. Where do we want to be and what are we going to do?
- Senator Ruff said I'm not going to be able to stay but a little while longer so whatever action you take particularly on the staggering terms please inform me. Greg if you would email me what that is I will see what can be done with the legislation this year. However, I don't think there is unless I can think of something to amend. But that is unlikely. But, so that we make sure we do catch it, don't lose all this experience at one time, I think that's extremely important, I'm glad you brought it up and if you make any other decisions I trust you to let me know.
- Bob Conner stated Mr. Chairman, if I may, I want to thank Frank for what he's done for the both the Committee and on the weed counsel and know he's got a busy schedule, but I just want to thank him before he leaves, what he's done for us. **Ann Austin said I second that, 'because he's been extremely attentive about getting here.** John Feild stated I would like to give you an ovation Frank. **This is my home and this is my District so I don't deserve anything like that.** Mike said Senator, I would say the same thing, and you've definitely been very involved with the Committee.

#### September 6, 2007 Meeting Minutes:

These minutes were approved.

#### Rick Linker, DEQ, "Legislation Regarding DEQ Citizen Boards"

- Alright, our 1<sup>st</sup> presentation today is legislation regarding a DEQ Citizen Boards. I think you are aware that there are 3 Citizen Boards that oversee a number of the policy and in some cases permitting decisions for DEQ and there's some legislative initiatives to maybe consolidate those and transfer some of the permitting power. We have Rick Linker here today and Rick, why don't you go ahead and get started.
- Rick said I am here to discuss what's going on with the Citizen Boards and the legislation surrounding that. There is a report that we passed out to you, I believe, that talks about some stakeholder effort that we had this last summer to discuss the legislation. House Bill 3113 and Senate Bill 1403 were passed last year by the General Assembly and it changed how we do business in VA with the Citizen Boards. It contained a re-enactment clause and so it didn't go into effect last year. Delegate Cox and Senator Hawkins asked DEQ to convene a stakeholder group to discuss the legislation and see if we can improve it and come back with a report, which you see there, setting out where we've reached a consensus and where we didn't reach consensus. I was the author of the report with help from all the stakeholders so, it details what went on. But, these Bills, Senate Bill 1403 and House Bill 3113 did a number of things. They basically replaced the 3 Boards we have now the Air, Water and Waste Board with 1 Board of Environmental Quality. That Board was going to promulgate regulations and then the rest of the stuff, the enforcement and the permit issuance, all the day-to-day activities were given to the Department. It also established a Citizen Board which would hear appeals of permitting decisions by the Department. It did contain a re-enactment clause which meant that it didn't go into effect last year. The General Assembly has to re-visit it again this year. The Governor did support it, but he didn't sign the Bill because it contained the re-enactment clause and because it basically didn't do anything last year. So, these Bills are in contrast to the current system that we have, the 3 Boards. The Waste Board promulgates all the regulations and then leaves everything else up to the department to do, which

is the issuance of the permits and enforcement. The Air Board promulgates all the regulations and then on a case-by-case basis can take up a permit or enforcement action depending on what they desire to see. Then the rest is done by the Director. Then you have the Water Board and their practice is doing all the regulations, they do all the enforcement and then if the public requests a public hearing then they consider the permit issuance and the department does the rest. So, what we did in response to the request to do the stakeholder group, we hired professional facilitators and we had a couple of focus group planning sessions in May, one with public interest groups and one with the regulated community just to kind of explore, you know, what we would need for this stakeholder group. So we did the research and then convened the stakeholder group and if you look at the back page of that report that we've handed out, it lists all the people that participated and their organizations. We tried to get business interests there, regulated interests, public interest groups, and environmental interest groups. A former Director of DEQ, representatives from the Secretary of Natural Resources Office, DEQ staff, and the Attorney General's office all participated; everyone opposed, supported, or remained neutral last year. So we tried to get a broad group to look at this and we looked at a lot of permit decision making models. For example, should there be 3 Boards, should there be 1 Board, or should the Director be doing all the permits. They came down to basically a couple of models that they discussed. One was called the Enhanced Water Board model and the other one was called the Modified 3113 model, being the legislation that came out last year. No consensus was reached in any of the models. In looking at the 2 models the Enhanced Water Board model would make all 3 Boards like the Water Board but there would be a couple of modifications. What would happen is, these 3 Boards would then all issue significant permits. That is they would have the issuance authority, not the Director. For these significant permits the Director of DEQ would make recommendations then the Board would have to consider those recommendations and say why they accepted or rejected his recommendations. We did do a straw poll but there was no consensus on it. There were people that strongly supported and strongly objected to it but, the majority of people had significant concerns. So we looked at another model that was the Modified 3113 model and this one the Director would issue all permits but, for significant permits he would refer it up to the Board and the Board would make a recommendation back to the Director which would be non-binding. The Director would have to, on the record, say why he accepted or rejected those recommendations. Under both models the Boards are still promulgating the regulations so, that's not been disputed. We took a poll with some additional details we needed to put on this model and no consensus again, but there was less objection to this model. But still it was not anywhere where we needed to be.

- We did find consensus on a number of things. One, the group really liked the idea of making all the Boards the same. It is very difficult for permit holders and even staff to get the three different procedures correct. So, people were looking for consistency. They wanted more predictability and they wanted the process, to not be more time-consuming or complicated, as it is complex enough already. We wanted to make sure that there was early collaboration so that there wouldn't be problems down the line in the issuance of these permits. If you adopted either one of these models the group tended to want separate Boards as opposed to the one Board. They also felt that the Board should consider the permits either being in the 1st model for issuing or the 2nd model for recommendations only under rare circumstances, like the big permits. So, because there was no consensus we did report on what happened but there was no clear direction to the General Assembly, unfortunately. But, now what we have on the landscape this year that has been introduced within 5 different Bills dealing with the boards. The 1st two were by England, Delegate England and that's House Bill 18 and House Bill 19. House Bill 18 re-enacts 3113 from last year, but it adds an enactment clause that grandfathers all the permits that are before these Boards on December 31, 2007 so that they can go under the old system. It takes out some of the political issues and things like that associated with these changes. House Bill 19 that England introduced basically repeals everything that was put in last year so it would keep things the same as we have now. House Bill 650, Delegate Hogan introduced this one and it changed the membership of all 3 Boards in that each Board would have to have a member from one of the other Boards. So, for example, the Water Board would have to have an Air and Waste member on it and visa versa for the other ones. So there would be some sort of holistic approach maybe to

what's currently going on. What it also did is gave the authority to the Boards, just the Air and the Water Board to delegate permits to the Director and it also gave them the ability to not delegate the permits if there were significant public interest in the permit, there's substantial and disputed issues with the permit, that the disputed issues were within the Boards' authority, for example, we don't, we deal with, in water we just deal with water quality, we don't deal with zoning. So if it's a zoning issue, you know, they would not take it and they also wanted to ensure that the Board could take it in a timely fashion. So they could delegate it to the Director, that's pretty much existing law now, but what it does is define when it is sent.

- House Bill 1332 was introduced by Delegate Landis and Senate Bill 423 was introduced by Senator Puckett and those are identical Bills. It looks a lot like what was discussed in the stakeholder group for the modified 3113. What you see in this Bill is that the Director issues the permits for the Department. The separate Boards remain distinct and they do all the regulations. The Air Board membership right now is 5 and the other two are at 7. It goes up to 7 so they all become the same and everything is made identical with the 3 Boards. That means the Waste Board is assigned more duties. They will be seeing permits where they're not doing it now. It will allow for public hearings under certain circumstances that are similar to what the test is under the Water Board model now, which is the most expansive test. And then, after these public hearings the Director could refer a permit up to the Board, if there were significant legal and factual issues. The Directors ability to issue a permit would be enhanced by the Board's participation, which is the Board's recommendation, so that these issues can be resolved by the Department. For example, a significant legal issue would not include a zoning issue water quality issue and so then the Board would make a recommendation back down to the Director to help him or her make a decision. So, all 5 of these Bills have not made it to Committee yet, so we don't really have a good feel about what's going to happen and how they're going to resolve. We anticipate that we might see something as early as Monday on the Senate side to go on to Committee, but the docket the last time I checked wasn't up so we're not really sure what's going happen. But anyway that pretty much concludes about what's going on getting you up-to-date. Are there any questions about any of this?
- Bob Conner asked how about funding? That's always a question. I know with DEQ come up over the years. It is nice to come up with and do all these things but are we going have the personnel, the funding there for the personnel? **Where we've identified, like for 3113 from last year, we identified some savings because you would combine the Boards. For Delegate Hogan's Bill this year we haven't identified any fiscal impact and for Senator Puckett's and Delegate Landis' Bill had a insignificant increase in expenditures because the Waste Board would have more authority and we'd have to staff it. There would be 2 more members on the Air Board which we don't have now and we'd have to pay for per diems and you know, stays at hotels and things like that but, the amount of the change would be absorbed within the departments current budget.** No additional personnel? **Not for the department, just adding a couple extra Board Members.** My opinion and my experience that I've seen through just in that area is that that is a need of more personnel and they needs to be more funding in that, I guess was my primary question. Will funding come in for additional personnel or they just going say combine all of these 3 departments and you do with what you can on personnel now?. Is that basically it? **Yes. We would absorb. What's going on currently in the Air or in the Water context is less than 1% of the permits are issued by the Board. You still have to go through the analysis and everything before it gets there even if it's going be issued by the department. So we're going through the same analysis and we still need the same expertise and the same staffing support so it just turns out that if you're just changing the decision maker we're not seeing an additional significant impact in finances.**
- Read Charlton asked what the size of these Boards and the staff is for the Water Board, the Waste Board, and the Air Board. **Well, their membership is 7 on the Waste Board and the Water Board and it's 5 on the Air Board: citizen members and then the staff of DEQ is the staff to all 3. It's difficult to say, we have like 900 people in the agency, but it's difficult to attribute what the staffing level is for each Board. I do know that there is significant amount of**

staffing necessary to prepare for the Water Board and the Air Board not so much for the Waste Board because they don't have permits, they just do regulations. Read continued how often do they meet? Quarterly. All 3 of them are required to meet at least 4 times a year. But they can meet more. How long do these meetings last? Typically, for the Water Board they've lasted typically 1 day but sometimes they'll go 2 and the Air Board has had a lot of significant increase in the meetings in the last couple of years they're probably like having 6 or 7 meetings and the Waste Board they're doing it quarterly they don't have a lot on their agenda. Where are the members come from? All over the state. Their qualifications are that they represent different areas of the state and so we try to get them from all different regions.

- Mike McEvoy stated I guess that's the editorials and state papers that are in favor of consolidation and then meeting with permitting to the Director primarily make permitting decisions in a professional capacity and then I've seen editorials that have been against it because it is perceived to be stifling citizen input. It really sounds like what you're talking about right now is we have a hybrid system of staff doing a lot of permitting decisions with some level of citizen input to the Boards and the Bills would essentially kind of continue doing that. **Yes, the Bills, if I was looking into my crystal ball, the 3113 that we had last year and Delegate England's effort to continue that is probably not going to go anywhere. So what we're going to see is probably if we do have a chance something like Delegate Hogan's which he was he's trying to make things similar and put some meat on when these Boards hear these things but he only did it for 2 of the Boards and it didn't have consistency with all 3. The Puckett and Landis Bills are making everything the same and we're really interested as an agency to keep the same level of input from the citizens and so we're not interested in reducing the public hearings, in fact, if we're using the Water Board model: that's the most expansive of the models and getting citizens in. There are 2 ways to look at citizen input, you know, just, you know, me a farmer coming and wanting to comment on something that's going on versus citizens serving on the Boards who are issuing the permits so, I think most of the objection from people saying that there's been a reduction in citizen input is that the citizens aren't going to have a say as much a say in the permit issuance issue. We really benefit from public input and we don't know what the issues are until they tell us a lot of times and the surrounding people that are affected.**
- Robert Conner asked do you see an increase in work assignments to be required of DEQ? If we go with the Landis model, probably. **Well in one respect it's like squeezing a balloon over here and it gets bigger over here and squeeze it over here then it gets bigger over there. Don't give me the political answer because you and I both know it's going to add more to DEQ and where's the money going come from. Not necessarily because what we are is increasing what the Waste Board's doing, but we're probably decreasing the amount of permits the Water Board's going to see. What's going on with the Waste Board are probably things that should be seen by citizens what they're primarily dealing with are landfills and there's nothing more controversial than a landfill. I'll stop on this, but the average citizen is not on this Committee Citizens Group. Right, yes. Lawyers, Campaign VA etc., are on it. So the average citizen throughout the Commonwealth of VA has no idea what all this is about. I'm just concerned because I know in my own county through the Health Dept that more and more of the Health people are saying, if you want to check your property to see if it's going perk then hire a soil scientist. So you have to go through all this procedure. I'm just concerned about the funding to get the personnel to cover the State of VA to do an adequate job and you say we're going to reduce the permitting in the air pollution area. That's just as important as the Water source. I'm just concerned as a citizen and as an elected official about the funding part of it. They come up with all these things and then they don't have the funding for it. Oh, you're right and we are very sensitive, people are always trying to tell us in the General Assembly to do things and we're like, that's going to have to have a budget amendment with it and we do a financial impact statement that goes along with every Bill that could have an affect and sometimes, like we got one that was going to cost us \$20 million a year and we're like, you all and the General Assembly should know that it's not these Bills. This one, the General Assembly also**

needs to know that while there might be an increase we won't need to ask for additional money because we can absorb it within our existing budget and we feel that we can. We don't want to be stuck. The worst thing that could happen to DEQ is being stuck with a program that we can't carry out to the expectations of everybody because when we look back and we're not giving you or the General Assembly what they ask we guard against that a lot. But we are letting everybody know that this is going to cost money, but from what we've seen all the impact from all the different models it should not have a significant impact. By the way, all the models, this is very important, no matter whose it is, it is environmentally neutral. We're not changing any of the requirements or anything like that. It's just who is going to make the decision. So there's not going to be any reduction or basically increase, it's just neutral and we're also interested in that.

- Read Charlton stated Rick one of the issues that this Committee has dealt with over the years has been the transfer of water out of the Staunton River Basin. Now is the Water Board going to deal with that? **They will deal with that by regulation still. Of course they are promulgating regulations that are based on the General Assembly's laws and so they do, they will still affect the policy. If there's a permit or inter-basin transfer under the Landis and Puckett model the Director would issue that. He might issue it anyway under our current model depending on if there was public input or a hearing required and I bet that would be one that would probably go to the Water Board because they might be interested. It's still going to be looked at by the professional staff. The only difference is does the recommendation go to the department or the Director or does it go to the Board issuance. Right.**
- Read continued another issue that's come up recently is uranium mining in Pittsylvania County which has the potential for polluting the Staunton River. Now, is the Water Board going to deal with that? **We are still in the preliminary stages of looking at it, but we are looking at it. If they are allowed, if the prohibition is lifted on uranium mining there's going to be an air ... There's a moratorium right now. There's a moratorium now, but if the General Assembly lifts it, then there's going to be implications for all 3 programs. There's probably going to be waste issues, air issues, and there's going to be water quality issues and they'll have to get permits for all that stuff. That won't change. We've been hearing rumblings about the uranium mining for a year now, because the price of uranium is going up. I attended a meeting last night in Halifax County and there was 600 people there. Yes, I overheard you say that, that's a hot, hot topic and there's a lot of uranium out there. \$9 billion in the Coles Hill Deposit. That's a lot. \$9 Billion! I know, the 'B' word. I heard \$10 so, yes, there's some interest there.**
- Robert Conner added in addition to those 2 items and I know the Health Department's involved in this but it comes back to DEQ, along the Roanoke River Basin, specifically in Lake Gaston, I know over the years that there's been certain businesses that have been permitted for solid waste and treated discharge. There is a proposal in Lake Gaston 20,000 gallons a day with a condo project and you're going to see more and more of those coming along. Course if it's done properly people may not have a real big problem with that but, it is a concern that once a permit has been granted to one individual or a company then they mushroom all around along the Roanoke River Basin on discharges. These discharges are not from a municipal facility they're from private firms and when you have private firms you don't have the people that are qualified to check daily the flow of the sewage. **Read asked Bob to explain further.** We have in Brunswick County and the County has no control really over it, a piece of property on Pea Hill Creek that they propose to put condos there. They don't have enough property to have the normal treatment so they're going to put in a special treatment plant and 20,000 gallons will be discharged each day into the Lake Gaston **Is that treated or tertiary?** Supposedly treated. I think that's something that we need to really look at from Committee. I want to know where you all might be on that, or are you just going to start forbidding these, once the Health Department comes in and says, 'Oh yes that system will work' and is DEQ going to jump in there and just go ahead and permit those or are they going to be guided by what the County's reaction may be and the citizens in the County? **Rick stated for our permit, you know, it might be a combination of an actual discharge from a package plant into a river or receiving stream or it could be a combination of planned application or septic**

or whatever, we do the discharge part and of course, Health Department does the septic and the drain fields but, for every VA Pollutant Discharge Elimination System Permit, VPDES Permit, that we look at, we make sure that the water quality is protected and one of the things before they can have a complete application is that they have to check off that the County, that the zoning, that they've met with those requirements. So there's, there's a couple of things going on here, you know, before they can, we make sure that they've checked with the County because we're not going to spend our time on it if they can't even put there in the first place. Alright, you mentioned and I don't want to belabor the point, but we can't control the Health Department. We approve subdivision plats subject to the Health Department passing their inspection on it. So Brunswick County has no say in this thing other than to jump up and down or have a resolution to DEQ to be opposed this project. There is nothing in our regulations or in our zoning laws, nobody can come back. Once the Health Department puts their signature on it that it's approved and I'm sure you all work the same way in your County, you have no control over it. **We do get these issues a lot and remember I brought up zoning. Zoning is such a hot topic. We are limited by statute to just look at water quality and so a lot of the times when we get people coming to us and doing comments they don't like where something is going, well we don't have any authority over that, we don't, the General Assembly hasn't given us any authority over local land use issues. And I don't ever see that happening because they want to leave it to the County and then you have the issue of whether or not the County has the authority in the first place or the locality to limit these things and even if they do, whether or not they've exercised that authority by either zoning or ordinance or something like that.**

- Read Charlton stated no disrespect to DEQ, but 10 years ago DEQ did not keep the PCBs out of the Staunton River and we're still dealing with it and they're still down there. **PCBs are a huge issue too. We're looking for them and it's a very difficult thing to find the source and we're seeing more and more when we look.** Now you're saying that this change in these Committees these Boards is going to improve that? **No, no, it's going to be environmentally neutral. Everything's environmentally neutral so your issue about water quality, your issue about PCBs, it's going to be all the same, it's just who's making the decision. It won't affect the requirements that you're not to put PCBs in the river or that you have to clean it up if we find that you're responsible, it won't affect that at all.** If we get, if we get uranium mining and it pollutes, puts uranium pollution into the Staunton River, it'll be in there permanently. **We're not going to allow that. There's certain things you don't allow at all, certain toxics.** That is highly toxic. Yes, yes, we don't, we're not going to allow uranium going into the river. One way or the other, no matter who's making the decision, if they do that they're going to be in a whole heap of trouble. So that's not changing. Well, you didn't keep the PCBs out, how're you going to stop the uranium polluting? **Well, we do, these people that are going to be potentially mining, it's going to be a very discrete small group.** It's a small group, but it's 1,300 acres and is an open pit mine 600 feet deep. **You're right. Now, I'm not even, we're not, I don't know, I don't know, it's going to have to go through a long process, but we will do our best to protect the water quality and some times we might not allow a discharge if it's going to have something in it at all. But we do look for water quality issues to see if the river can assimilate the pollution.** Surface water or ground water? **Surface water, we don't allow it to go into the ground water.** Mike McEvoy said maybe our next speaker can speak to some of the monitoring but, Rick, I appreciate it. Do any other Committee members have any questions?
- Ann Austin said I just want to say, this is more organizational this has nothing to do with whether someone's going to let something happen. **Correct, it's organizational.** It is organizational and environmentally neutral. **By the way, this is not our Bill, the administration's not proposing it. While they supported last year, the Governor this year indicated he would like to see 3 Boards this year, the Director issuing permits, and the Boards doing the policy through regulation. But, he hasn't supported any particular Bill. This isn't coming from us but, we're in the middle of it because we are hugely affected. We're providing as much technical expertise as we can to make sure, what we want is whatever we get that works and that it doesn't mess with the environment.** Bob Jean replied you don't have a particular

recommendation? **For these Bills he hasn't supported England, Hogan, or Landis, or Puckett. However, the only one that meets all the criteria – 3 Boards, all the same, and the Director giving the permits, and the Boards promulgating regulations are Landis' and Puckett's. Not even 3113 from last year because that combined the Boards together and so, you know, the consensus recommendation was to have separate Boards and so he's going with that he thinks that's a good idea. But really they're the only 2 that fit the Bill and they are identical.** Mike thanked Rick for being here today and answering everyone's questions.

**Jason Hill, DEQ Freshwater Probabilistic Monitoring Coordinator, "Probabilistic Monitoring Data in Virginia"**

- Alright, our next presenter today is Jason Hill. Jason is going talk to us about Fresh Water Monitoring and has a PowerPoint.
- Thank you. It's good to be back in front of the Advisory Roanoke Advisory Commission again. I know I've spoke with you a few times. I have changed positions from TMDL Coordinator when I came and told you about the special studies we do and water quality standards violated and we went through that whole process from development to implementation and talked a little bit about that. I currently have a new position that I took over, I don't know, about a year ago, it's called the Freshwater Probabilistic Monitoring Program I will be talking about that for the next 30 minutes. I really want it to be just a conversation so if I say something that you guys don't understand just stop me right there and we'll hammer it out. Right before I get started I do want to mention 2 things just based on some of the comments that came at the end of Rick's talk there. First was the comment on package plants. I'm not an expert so I'm not going sit here and tell you I am, however, we have a woman that we work with, Marcia Degen, the Office of Wastewater Engineering that knows a lot about these package plants. She may be someone that could come to speak to you at one of your meetings and certainly could educate this group on that. The 2<sup>nd</sup> issue was about the PCBs in the Roanoke and again, I'm not going pretend like I'm a PCB expert today; but, we have Mark Richards who is been working very hard with Potomac PCB TMDL and is also pretty much in charge of the upper and lower Roanoke Basin's current study and source identification. He may be somebody in the next year that would be a very good person to come talk to this group about the current work that's going on.
- At any point stop me and we can go into more detail about something. As it says I'm the Probabilistic Monitoring Coordinator on the agenda and that fancy word is up there again in my presentation. Probabilistic is just a fancy word for random. We randomly select stations to go to. That's all it is, so don't be scared by that word. I do want to talk a little bit about history of Probability Monitoring Networks as a beginning point. This isn't just something new that dropped out of the air to start doing it. One of the first examples that everyone knows about, we don't have any of our elected representatives, but you know, when someone's running for office they look at polls where they randomly select 1,000 people in Franklin County. They say, are you going vote for Charles Poindexter or Eric Ferguson? And, you know, they can project based on this 1,000 people they randomly selected, who they think is going to win that election with some sort of plus or minus 3 or 4 percent certainty. So that's a use of randomly selection. **A poll?** Yes, a poll. That sort of what we can do with our streams. We can randomly select them and then make estimates from a few hundred samples with statistical confidence. There are other natural sciences that have used this in the past way before EPA or DEQ decided that this could be a good thing. One of the 1<sup>st</sup> applications was in Forestry. Say you buy 1,000 acres down in Halifax County and you want to know how many board feet per acre you have on there. A forester would set out transects in the forest and go out and take 100, 200 samples and they could project how many board feet they have on that 1,000 acres. **Yes, but those samples were not random.** Some of them are. Some foresters use that technique. They use a lot of different techniques, but one of the ones that Forestry used in the early on, well before water sciences ever decided to try to use the technique, was the use of probability schemes to randomly selecting from transects to determine how many board feet per acre they could have. One of the 1<sup>st</sup> examples with water was the Acid Rain issue that came up in the late '80s. A lot of lakes in New England were coming acidified and



Congress brought, you know, some EPA reps in front of them and said, 'Tell me how big a problem this is. How many acres of lake are being impacted by Acid Rain.' And, you know, they'd look at their targeted data that the states had been collecting. New York has 3,000 lakes and 12 staff people and could access so many lakes and Vermont may have 300 lakes and the same amount of staff for a much smaller state so, basically what they found is these were sort of apples to orange surveys that they couldn't stick together and tell Congress how big this problem was. So EPA replied, 'Hold on, give us 2 or 3 years, we're going to do a probability survey, that is we're going to randomly select lakes and come back with statistical confidence and tell you how many acres we think are impaired. So that was one of the 1<sup>st</sup> applications that EPA used this for was the Acid Lakes Program in their early '90s. So they came back to Congress with a number. Congress said, 'Okay, we're going to use this, we're going to do something about it and they re-authorized the Clean Air Act in '92. They said, you know, you're going to have sulfate and nitrate reductions and it was part of that re-authorization. They've tracked that from '91 through current 2006 and done a 15-year update and they were able to use this probability monitoring to set a baseline, tell them how big a problem this is and then they were also able to use this same data scheme to track that trend over time. So they were able to show for that cost investment what they received how many stream miles or lake miles in this case were now being less impacted from Acid Rain. So, just a little history that we didn't pluck this out of nowhere. It is well-established using scientific principles and it's been applied in a lot of different ways. So my goal today is really to increase your understanding of our program that we have here in VA. Some things might hit you today and you'll understand, some things you may not, Greg was kind enough to put these flyers in your packet. I hope they're pretty readable and a lot of the basic concepts are in here and some of the things I've talked about are in here, so if you don't get it today or you want to read this and get back to me, I'm sure Greg knows where to find me. So, this could be a good resource today if you start thinking, 'What was that kid talking about?' You pull that back out and read it.

- I'm going to talk a little bit about our particular survey design in VA, what it represents, what data we've collected at all of our sites, and about some uses of this data. Then I will speak about the benefits of this monitoring and future goals. So basically what you see here is this map of VA with all these lines, this is a thousand map showing all the streams in VA. This is a 1/100,000 map which basically shows about 50,000 stream miles in VA. Now our target population that we're interested in seeing the water quality of is all perennial freshwater rivers and streams. That means they flow year-in, year-out. If it gets dry they don't just go away, that's not a perennial stream. We are not interested if we get there and there's a dam, because we're not interested in a reservoir for this particular program. We are also not interested in an estuary, so if we go out there and it's saltwater that is not part of our target population. But we will randomly select sites from those 50,000 miles all those stream miles. Basically this is how we do it. EPA's has a GSI program, computer software, where they put this hexagonal grid over top the entire state of VA. Then they randomly select within these hexagonal areas and they put it over all those lines I was showing you. They assign it a stream order which is how large a stream is. A first order stream, is a head water stream, while a fifth order stream is a big river like the Roanoke River in Roanoke City. They will put all these streams that are found in the randomly selected hexagon, put it on a line essentially and the computer program randomly selects segments and it associates a lat/long with that segment. So what I get is a station number and a latitude and longitude so I can take a GPS out there and talk to the landlord and say, 'Hey you were randomly selected and we're going to come out and do 400 and some water quality parameters on your land so that we can use that to estimate conditions statewide.' And then we have to get within, you know, 50 meters of this XY coordinate that has been randomly selected. So, that's sort of how the site selection occurs.
- When we go out there, I don't expect everyone to remember everything we're collecting when we go out there, the purpose of this slide is to let you guys know that we're collecting a lot of information when we go to one of these sites. You know, dissolved oxygen, temperature, pH, etc. is all very important basic information. We get biological community information when we're out there which is very important, because when you take a pH or dissolved oxygen that's very good information but it's sort of like taking a picture with your camera, it's just the one point. But your biological parameters are more widespread, they're like having a video recorder out there 'because

they're out there 24/7 having to deal with the conditions in the stream. So we do collect these macro-invertebrates, I'll show you a picture of them in a little bit and we do intensive habitat surveys and collect something called the relative bed stability which is a quantitative sediments collection. I know this Committee had talked about excessive sedimentation being a stressor in VA, Greg alerted me to that and so I've dedicated a few slides to how we can look at sedimentation here in VA. We also collect some bacteria parameters, many metals, and pesticides, and something that's new for the Phase II from 2006 – 2010, we're collecting algae, which is plants that grow on the bottom of rocks and things in the river, and fish so that we'll have more of these video-recorder-type parameters in the stream to tell us about the overall stream health of your community.

- Just to let you see where we've sampled in the 1<sup>st</sup> 6 years these dots show a nice spread throughout the state. Just to let you know that 15% of what we've collected wasn't target, so even though the EPA says 50,000 of VA's freshwaters streams, when it really gets down to it it's probably more like 45,000 because 15% on most of them you go out there they're just dry or there's saltwater influence and that's not something that would fall under our target population. And now since we've been doing this for 6 years most of the parameters that I've collected and can tell you about I have pretty high confidence within + or – 5%, which is actually pretty good. You can briefly hang your hat on that. This is just another quick slide to let you know, because some people think since we're going out and collecting biological data that we'll wait till base flow. They believe that we won't go out there during storm events but rather we only wait for stable conditions. We have actually been collecting data in the spring and the fall and we get samples at both rising and falling limbs of the hydrograph, which indicates storm events have occurred. There are stable conditions that we sample in. You can see the hydrologic conditions, how high the stream flow was in the spring. There are normal conditions a lot of times, but there's high level flows as well and in the fall there are low level flows. All this slide is basically telling you is 'look our data has been taken over 6 years over different water years and it is pretty representative of what the conditions are in VA.'
- Now I am going to go through some case studies just to show you some of the values we found from Probability Monitoring. Not only can we estimate 100% of our stream miles now with this survey design, we've also been able to do some biomonitoring validation studies to give ourselves better tools to say things about water quality based on the biology of these streams. We've done some innovative monitoring technology which in turn goes to support our TMDL friends to help us do better special studies to make better decisions about stressors. We have actually identified water quality stressor thresholds and get that information to people. We also track watershed management decisions so setting a baseline and then being able to track it in the future. The way we were doing our monitoring in the past, just a word on that and maybe a couple slides down in this presentation, we were doing targeted monitoring. We'd go to the closest bridge, you know, we'd do bridge crossings. This was basically our monitoring program, which has a lot of value, it really does. It tells you about that place in the basin. You can put monitoring stations above and below a discharge and compare the 2. You can track a local pollution event like say a spill. So I'm not trying to say targeted monitoring isn't very valuable, it is very valuable but some of the things, like I think one of the issues the Committee had was trying to figure out has sediment gotten worse or better over the last 20 years? Because of the way we're doing this targeted monitoring sometimes it's really difficult to go back in time and to extrapolate over whole basins and histories based on the way we were sampling. Whereas the way we're sampling now we'll be able to establish that baseline and in 10 or 20 years from now I could come back and talk to you guys about the conditions and how I think the biologic community's changed, how I think sedimentation's changed, how I think nutrients have changed and we could compare that to TMDL studies that occurred or any kind of new regulations that Chesapeake Bay required pollution controls on municipal treatment plants and industrial treatment plants.
- Real quickly, in case you've never seen the macro-invertebrates that we've collected in the stream, here is a Mayfly and here's Stoneflies. If you're a fly fisherman of course you know all about these things because that's how you catch fish. You take one of these guys and you get some fish.

Well, these guys can also tell you a whole lot about water quality. In 2001 EPA and a company that does a lot of work on developing biological indicators, Tetrattech, was hired to develop and to create a new biological monitoring tool using these macro-invertebrates in VA. They did a really good job and the report was given to us in 2003. However, we've run a lot of our new tools through our academic advisory committee to make sure it's scientific valid and they found some issues with the data set that we used, the targeted data set. This was because of the lack of watershed size diversity. Most of the reference sites that we're using to benchmark the best available conditions were in the mountains and not the Piedmont and we're talking of 62 sites maybe 55 are in the mountains and 7 in the Piedmont for this original report. And there was multiple samples of the same location which gave them heartburn and something they call pseudo-replication which they had a feeling we could be biasing the data one place or another. If you have 10 or 12 samples from 1 reference site and only 2 from another, that one that has 12 was skewing your data. So we were able to take our probabilistic data and identify an equal number of reference sites just using our 1<sup>st</sup> 4 years of data. We went from 7 to adding another 33 additional reference sites for our probabilistic data sets. So we quadrupled or whatever the number of reference sites in the Piedmont and added a bunch of new ones in the mountains and we don't go to these sites more than twice so we didn't have that pseudo-replication problem. So we were able to look at, re-evaluate, and there's a whole report on this, I'll show the link if you want to fall asleep one night, where we could look at season base and size eco-region and we did a lot of statistics from a lot of different angles, it's a great data set. It was a validation study. That is what we called it. We tested for environmental significance and we checked the calibrations we were using to benchmark our assumptions. What we found is our VA stream condition index we're very, well you can see a reference site, see these higher scores, so we consider anything above 60 to be going approaching reference condition and anything less than 60 going away from reference condition. So you can see streams that we thought had a reference condition had much higher scores. This line here is just an average of your distribution of reference sites and this is your stress distribution here. You can see there's a really good separation there and the academic advisory committee, after they read our validation report, was very supportive of what we'd done and they were very glad that we had taken the time to go through and do what we did. Now for the 1<sup>st</sup> time in 2008, the VA stream condition index is being used for our assessments and being used in our 305B report. Without the probability data we would have been here who knows how long sitting here thinking, 'How are we going figure out if we really think this works or not? How are we going convince the academic advisory committee that this is a good tool or not?' So it made everyone much comfortable including our management, which is good. So we also could take this new tool and not only could we validate our tool, but then we could estimate the condition using this tool of 100% of our streams miles. This is an example, you can make estimates about all non-tidal streams in VA and this is sort of what it looks like. So we think 21% of our streams, the biology's saying have severe stress, 24% is moderate stress, 39% are in good condition, and we would say 15% are in excellent condition. Basically the cut off between these categories is if your SCI is less than 42 you're in severe, if you're from 42 to 60 you'd be moderate, 60 to 72 is good, and greater than 72 we consider that an excellent aquatic community, a lot of diversity a lot of sensitive organisms are present. So those are fairly good streams.

- One of the ways, just so you can see an example of what my estimates looks like, we used the cumulative distribution function, don't need to remember that, to make these, you know, estimates of statewide conditions. This is just an example of one of the sites where we were doing a TMDL study where we had an aquatic community that was severely stressed and this is Peak Creek in Pulaski County. Peak Creek's actually right down here, but this is an old Allied site where they had done a lot of manufacturing since the turn of the century basically. **Read Charlton asked what did you say that operation was?** It was an Allied facility where they made DDT, reclaimed batteries, and made sulfuric acid. But you can see it's kind of purplish there. This has been cleaned up and today it looks so much better. This is a picture from 1989. This was kind of purple and had a lot of lead and zinc and copper in it. It was just sort of running right off into Peak Creek. It's called Doodle Dust, which is what the locals call it. The color is kind of purple. It is kind of hard to see here, but it's actually in the stream banks from where, you it had been deposited from running off the site. Some is seen in the banks and point bars. The Doodle Dust

would actually form into the part of the bank so you could be wading the creek and see some of this Doodle Dust in there. What you'd been able to see with our data is what the copper look like in the streams statewide. This is showing you that 90% of your streams in VA have copper in the sediment at 20 parts per million or less. So, that's what you normally see if you just go out and get a sample. Probability data's very nice because it can tell you things that, if someone would've come up to me a couple of years ago and said, 'What's the average concentration of copper in VA sediment statewide distribution?' I would've had a hard time. I could tell them, 'Well, you know, this is what we think it is based on our targeted data set,' but I could not have given them anything like this distribution with known confidence. And just to let you know, we've randomly had a site on Peak Creek a couple miles below this facility at 324 parts per million. As you can see that's, at the 99<sup>th</sup> percentile statewide. Right beside this site where we had targeted data sets I think the average copper concentration was actually 1,000. So we were able to use this data when we did this TMDL to help the people that were now responsible for the site. 'Look, you guys are really off the charts here for VA in copper. And they've gone a long way. I really should have put a picture of what it looks like now because it looks really nice. They've graded the site, they've removed contamination by identifying lead and copper hot spots and removing them, put a cap on it and planted grasses, and they implement a good maintenance plan.

- Read Charlton asked the company did that? **Yes, the company that absorbed this particular facility is called Honeywell.** Honeywell bought out Allied Chemical? **They absorbed some of their facilities, yes. I don't think they bought Allied outright, but they, Allied kind of just shattered into pieces when the Clean Water Act came into existence and parts of it were bought by different people. Honeywell came to own this facility somehow.** Well when Honeywell bought the facility, do they also take on the liability there? **Yes.** Haywood Hamlet asked what are they doing there today? **I'm not going tell you that it was an easy process, this is something that went on for decades and decades and finally our waste group and the TMDL group and I'm going give most of the credit really to the waste group, we sort of just gave them the ammunition, saying, 'Hey, you guys are impacting the creek with TMDL studies show the stressor.'** Our waste group took it and for the last, they've been in heavy negotiation for years, I think this sort of helped us take over the edge and the waste group really stayed on them and they worked out a cap plan and a maintenance plan that I think will finally stop the erosion from this site into the Peak Creek and start to give it a chance to, we're not wanting to go in there and dredge the stream and try to get out the coppers and the zincs that are already there. But by stopping what's going in we're going give it time to naturally recover. We've already seen some bump up in the biology scores, but they're still not meeting standards. It went from being a average score in the 30s to maybe the mid-40s so we've already seen like a 10 point increase. We suspect as we monitor for the next decade now that this site's cleaned up no sources getting in that we will continue to see it bounce up. There are other issues in the watershed besides this one, this was just the big one. This is kind of like that. Greg indicated there's no manufacturing at the site now. **Were you involved in the Massey Energy case?** No, a lot of that Massey Energy occurred where West VA and Kentucky and their DEPs were involved with that, I wasn't. **Read said there was a \$20 million fine.** Jason replied I saw, I read that in the Times. **Bob Conner asked was this considered a Super Site clean up?** I don't, it was in the 80s, right Greg? I believe it, it was but then they did some remediation, but we were still having problems and I believe we were very unhappy with the clean up. **Greg stated they originally put a cap on it which failed and then our waste group got more involved and I think it did go to Superfund for a while.** It was in the 80s but what this, this was cleaned up, was this under the volunteer remediation program, right? **That's right. That's what I think it was.** Read stated so Honeywell, they voluntarily agreed to spend millions of dollars to clean up. **I don't want to like speak joyously of them but, yes, a lot of staff especially Beth Lohman and a couple of people at our office and a couple EPA folks did some serious arm-twisting, yes and they did do the right thing eventually, yes.** What about the clean up with Babcock and Wilcox? **I don't know anything about that.**

I really want to get into the sedimentation issue that I think you guys were really interested in. One of the problems with measuring sediments in VA has always been we have a lot of different stream types in VA.

There's a lot of diversity from our mountains to our coasts. We know that there's some naturally sand-bottom streams, some streams that naturally have more sediments in them than others. It's always been real difficult to just go out and look at the streams and say, 'Oh, I see sediment that's a problem automatically.' You can't just do that. We do know that sedimentation does impact aquatic communities and we know it's a big stressor in VA. Until recently there was no quantitative data to really try to say exactly what that was. This slide shows over here there's a lot of interstitial spaces, a lot of critters live in. This may be like some pretend ideal condition that, that's found in the environment. Then you see there's more sedimentation moving around and when, when a lot of excess sedimentation has come in and filled in those spaces. At that point less things can live there, there's less habitat for your fish and your benthic macro invertebrates. But this is just sort of like a spectrum showing from the ideal conditions to the stages of sedimentation. Now, what we do to try to quantify excess sedimentation in streams is called the relative bed stability (RBS). It's a technique developed by EPA, using lot of researchers from a lot of different areas to help develop this methodology.

- Essentially what you do is you go out to this, you know, random lat/long that I've been assigned, I go to the stream and say this right here, F site transect F, that's my lat/long that I've been given and based on the width of the stream, we go up a couple hundred meters and down a couple hundred meters. Sometimes we'll do 1,000 meters if it's a really big stream, but we always do a minimum of 150 meters. And we lay out 11 transects and in each transect we collect, we start on this side of the bank and we collect the particle size and a depth and then we go  $\frac{1}{4}$  of the way across the stream and get a particle size and a depth,  $\frac{1}{2}$  way, then the 75<sup>th</sup>, and the other side. So we're getting 5 particle counts and a depth at each of these transects and at a mid-point reach. Then going from transect A and B we also collect the slope of that stream and also what's called the thalweg, or the deepest point in the river. And all this information is used in the spreadsheet. We calculate, we know what we find in this stream is our average particle size and then based on the slope and the bank stream geometry information that we calculate, we calculate a stream power. So the denominators for stream power and it's telling you basically, 'Hey, this is what the stream can carry, this is what basically the particle size that should be found here based on the slope and the geomorphologic characterizations. Now the numerators tell us what we actually found out there. So you take this ratio and you log it which tells you, 'if you get negative numbers you're knowing that that stream is carrying, more fine sediments than it should be. If you're -2, -3 you're carrying a lot of excess sediment than should be found there based on the stream power versus what we actually found. It works the opposite way too. If you get positive numbers, like +2 that can actually tell you some problems in the opposite direction that the streams actually too hardened and sometimes you'll see. I've been to Chattanooga, it's got a great downtown, but if you look at it their Chickamauga River down there it's got concrete on both sides of that bank. If you went and did relative bed stability there, you may actually get a positive number that it's too hard. Excess fines are not the problem there it might be too hard. RBS can tell you both directions if it's been disturbed or if there's too much hardness and it's actually sediment starved. This can actually be an issue 'because you do need some amount of sediment. Then on the opposite side you have excess sedimentation just real quick. I want to go through maybe a few of the things we collect here. Bank full depth is one of the things we have to get and that is the channel forming feature. It is called bank full depth because that's the point where it's not spilling over into the flood plain and dissipating energy. It is the point where it's at the top of the banks and going through and moving particles around and that's, that's sort of the channel forming feature that should tell you what size particles are there. Down in here we're collecting, you know, particle sizes and we're collecting 105 of them randomly through these transects. We assign 9 different size categories when we're out there. If you're less than 2 millimeters you're either a sand or a fine. The way you determine the difference is by feeling it. If it's gritty it's sand or if it's just smooth then it's a fine. Then we have a course gravel and fine gravel with course gravel being like a marble to tennis ball size and fine gravel would be more like a ladybug to marble size. We also identify cobble, boulders, small boulders, and a couple different bedrocks and of course, sometimes you find wood and stuff in the stream like hardpan. So we have 9 different size categorizations and the way we do our average particle count is the average of those size characterizations, those 9 different size characterizations. Which actually there's a couple of

different competing methodologists and they all kind of use the same scheme. So just again, let's review the relative bed stability. It goes from 2 to negatives so if you're up here it's telling you this thing is getting a little hardened down here you're getting excess fines. The, your little pamphlet has a little bit more text to go with this, so when you leave here and you want to kind of re-read it again it has some nice text in there. I just do want to mention that sedimentation has been found to be in quite many biological studies and this relative bed stability can give quantitative habitat information. I'm sure, like they say in the Roanoke River, my group found sediment to be a problem, it would have been nice to have some of this data to help us, to talk about stream bed sediments versus organic sediments in the water column. Again, this is just a picture of stream diversity in VA. These 4 streams are actually within 100 miles of each other and you can see that you've got huge boulders in here, nice size boulders and cobble here, mostly cobble here, and then a lot of fine, see this is actually a little river in Floyd County. **Read asked where is the bottom's one?** That's actually in the Piedmont Region. I'm not actually sure. I think that's Dragon Swamp or something. I've seen a lot of wetlands. But you can see that's part of the difficulty in trying to define excess sedimentation in VA. The nice thing about the LRBS is it will change based on slope and bank full radius. It will change what you need, what you expect, so your calculations change by region.

- Okay, try to give me 5 minutes and I'll try to get through the rest of it. The semi-permeable membrane device (SPMD) is something that can be used. You leave these out for 30 to 60 days and they can help you track PCB sources. Mark Richards may come talk to you a little bit more about how we use these but one of the 1<sup>st</sup> places we tested almost was within the Probability Program. You also can look for emerging contaminants with these, we have not, but I know things like endocrine disruptors have been in the news where fish have been exposed to estrogen and becoming feminized so, you could actually measure estrogens in the water columns using things like SPMDs.
- Water quality stressors, this really kind of feeds back into your sedimentation issue. One of the things you can do with probability data is calculate relative risk. Relative risk, you've all heard the news that if you have a cholesterol 300 you're 4 times more likely to have a heart attack than someone who has a cholesterol of 150. What you can do is, with probability data, say that you're biological condition, we set an optimal and sub-optimal condition, you can do the same thing for your stressors and you can borrow the terminology from the medical field and say some things about the extent of these stressors and their relative risk to the biological community. So when you have excess sedimentation and LRBS less than -1, which is found almost in 44% of the streams in VA, that's our estimate right now, there's a decent confidence interval on that one. But what this is saying is you're 5 times more likely to have a bad biological community if you have your sediments less than a -1. Another example would be, total phosphorus. If your phosphorus, in this situation is about 50 parts per billion, we estimate 16% of the landscape, you're 2.5 more likely to have a bad biological community. So what probability data is, you can estimate how big a problem it is on the landscape and also its risk to the biological community.
- One other thing here is we have with TMDLs, we have a lot of landscape a lot of people working really hard DEQ, DCR trying to get the landscape going from a worst management practice to a best management practice and our probability monitoring started before a lot of implementation plans went into impacted areas. DCR gave me this slide and you can see that there's implementation going on across VA. In the future we can set a baseline with our first set of data and in the future, as implementation progresses, we try to say how we think what's improved across the whole state. Now I just want to again emphasize it, if you want to know exactly what's happening in the upper Blackwater you still need targeted monitoring. You know, you could say, 'Hey, we've excluded all this land these livestock in Blackwater river what has it got us?' Well you need targeted monitoring still to try to tell you the something that's going on in a small basin. Probability Monitoring gives that big overall picture and this is my last slide.
- So in summary, where have we benefited? We validated new biologic tools, doubled reference sites, identified stressors, we've brought in new technologies including relative bed stability and

SPMDs. With our assessments we've set the baseline for ecological and chemical trend analysis and been able to report with known confidence on water parameters. We've really reached out and partnered with a lot folks in the state and we really appreciate all the biologists' work and all the landowners and EPA support. That's my information and this is our website. So, thanks for letting me gabber for a while.

- Mike asked if there are one or two questions for Jason real quick before we move on? **Read Charlton stated one of the problems we have in Charlotte County is run-off from the septic, drain fields because we have a lot of small farms. Would your random sampling, pick up fecal coliforms?** Yes. That is one of the parameters we collect and E. coli actually are used now as the standard. There is a transitional period where we are using both. We do pick that up and we are able to estimate state-wide what percentage of streams are above that, we don't actually do random source tracking, so I couldn't tell you exactly if it came from humans or if it came from livestock or whatever. I can tell you basically how many streams miles I think are above our standard which is important because it's one of our big parameters that violate statewide and we target our monitoring to kind of known problems. I think sometimes that kind of skews the fact that we do have a lot of really good head-water streams that don't have these bacteria. I have some statistics actually that are done with bacteria and landscape covering so maybe we could talk about that over lunch I'll be here, but I have something that you might find interesting.
- John Feild asked is there a similar program that targets reservoirs? **There is! I don't do it and the State hasn't adopted it. Places like Minnesota . . .** I was hoping in Virginia. Oh, oh, well let me tell you. VA did participate in a Lakes National Survey so we randomly did 26 lakes last summer and it was pretty interesting stuff that we did. It was the most intensive lake work we've probably done. Some states that have more lakes than they can assess, like Minnesota, thousands of lakes, they do randomly. They've started doing random lake surveys so they can estimate condition of all those lakes. In VA there are about 122 lakes that are public access or water supply that we monitor. Since there's such a small number in a 6-year period we typically can get through a majority of those and do an assessment on them. So probability monitoring may not be needed for something with a resource that you can completely since it's for when your resource is so big. Now the perennial 50,000 miles of streams for VA you cannot physically monitor those. We are blessed in VA. I remember talking to the guy who does the Arizona probability he told me his sample frame was 7,000 miles for perennial streams they have in Arizona. We got to take care of our 50,000 miles but we are blessed compared to some states. **Read said that was Arizona.** Yes, I think it was Arizona and Utah's not much better. **John Feild stated the VA Division of Game and Inland Fisheries does do limited sampling within the reservoir does it not?** They do. **It doesn't get down to the benthics and so forth?** No, but that's something we did with the National Lakes survey and in a couple years' we're going learn about how successful that was. I think maybe we should talk maybe more over lunch too, but we did some real neat research over the summer.
- Robert Conner stated I want to thank Jason and DEQ for stepping in and doing their best. My generation has done a very poor job keeping our streams clean and the younger generation is coming along now and doing a fair better job. A lot better than my generation and that to me gives my grandkids and their kids an opportunity to see what we were able to see years ago with our grandparents. **Yes but we couldn't do it without your support so we appreciate it.** So, I thank you young guys for jumping in there and picking off where we left off. **Well I am getting some grey hair working for Greg.**

#### **Water Withdrawal and Inter-basin Transfer Issues with NC:**

- I think Greg sent out a newspaper article a couple of weeks ago, maybe a month ago at this point, that NC is looking at their Inter-Basin Transfer Rules and they're going have a series of, I guess, workshops or some kind of discussion sessions. They actually have a little more defined program regarding Inter-Basin Transfers as they have a rule that you take water out of the Basin you have

to somehow replace it. So typically what you see there is a maybe water withdrawal to a community and then they bring most of their wastewater back so there is not a significant net loss in quantity. I guess you could always argue that the quality maybe changed, but now they're kind of going look at whether that's the appropriate procedure or not. Obviously it's probably driven by NC having a severe drought. They've been in it, I guess, for a year and a half and this spring and summer doesn't look any better for them. So shortage. Yes, shortage is driving this and they are looking to get water from areas that have some to the areas in need.

- Terry Wagner stated that before we get too far along, I think that the series of meetings, and again, I'm not intimately familiar with the workings of NC government so take everything I say with a grain of salt, but the series of meetings that are currently going on are Water Allocation meetings. They are not tied directly to the Inter-Basin Transfer legislation and regulation that exists in NC. My very limited understanding of the Inter-Basin Transfer Requirements in legislation and regulation in NC are those returns of water are only required when there are documented adverse impacts. So, as an example, I think that you've got a proposal in front of you where the group in NC is talking about going from 10 to 20 million gallons of withdrawal from the current reservoir. In that case, there is an evaluation process that looks at impacts both from the withdrawal stream in the Roanoke River and impacts to the receiving streams the Neuse and the Tar and if there no adverse impacts, it's okay. If there are adverse impacts that can be mitigated, that legislation requires mitigation. So it doesn't necessarily prevent them but if those impacts cannot be mitigated then arguably that withdrawal would not be allowed. So, in all cases it does not require the return of a like volume of water to the watershed.
- John Feild replied thank you, Terry. I've been actively involved and getting on my soap box for a number of years as these gentlemen can attest. We have been waving the flags concerning Inter-Basin Transfer and that's one of the 1<sup>st</sup> resolutions that this body did adopt. We've been working under the misconception that no Inter-Basin Transfer was currently taking place out of the Kerr Reservoir or the Basin in essence with the exception of the Virginia Beach Pipeline. I was the Manager of Kerr Reservoir for a number of years and had a 30-year career with the Corp so I am somewhat familiar with their operations. I live within a half mile of NC border and watch the NC television stations, so I'm somewhat aware of the problems that they have. This summer we had a water main break in Henderson, NC which is within the Roanoke River Basin. Schools were closed in Lewisburg and Wake Forest in Franklin County, which is outside of the Roanoke River Basin and that connected the dots for me that Inter-Basin Transfer was taking place. The Kerr Lake Regional Water System through their permits and so forth from the Corp of Engineers which was grandfathered wherein they were allowed to take 10 million gallons per day of the Kerr Reservoir. This was put into a documented form and they became a stakeholder, a shareholder in the operation of Kerr and that they had an allocation of water assigned. We have been concerned that, as everybody has, that there's not enough water to go around and in particular what's being evidenced over in NC, whether these decisions have had adequate input from the State of VA in as much as this is a Federal Reservoir that we're taking about down there. They're the operators of this thing and they can allocate the water to whomsoever they desire, I presume, unless there's Federal legislation that would require the reservation of certain amount of the allocation be reserved for the host basin. That we probably need to talk to our legislators at the national level to try to effect some type of legislation in that regard. But the environmental policy act requires publication, public participation, and comment. The fact that this is being done incrementally and piecemeal I'm not sure that adequate participation been accorded to the State of VA as evidenced by our laboring under a misimpression for almost 5 years. As DEQ promulgated regulations which required planning for water supply and I happened to sit on that committee, as Scott may remember, and I attempted to raise the problem at that time. I guess we were under a short fuse and timeframe to get something out but what I got was, don't put that up here, we don't want to discuss it right now, because we were tasking the municipal subdivisions, towns, counties, etc. to promulgate water supply plans. If they identifying their source of water as a federally regulated and controlled reservoir the plan was as meaningless as the paper it was written on. I mean, the water could come up and we would need it and it would already be allocated somewhere else. So, it was a problem that I could see that maybe didn't apply to 90% of the Commonwealth of VA but



did apply to those in Southside where we have 2 major reservoirs. So, I am talking with Greg and supported by Mike and Greg in flushing out a number of the documents that support what's going on with our neighbor to the south and found that we're not ready to step up to the plate. That DEQ and the Department of Natural Resources in VA needs to be proactive so that when and if we have an opportunity to sit down with our neighbors from NC, who have shunned this august body for the duration of our existence, that we would have some positions developed, some safeguards established that would have to be triggered by a drought management plan prior to them taking waters that are generated 90% from within the Commonwealth of VA, 75% to 80% maybe even 90% stored within the Commonwealth of VA and being allocated to our neighbors to the south. Not that we as fine citizens of the United States would want to deprive our fellow citizens of water during time of need but, some type of state legislation, DEQ and Department Natural Resources need to be putting the thinking caps on and task some of the staff to be working this issue because these are the first salvos of the water wars of the East. The context of a document that surfaced on January 4<sup>th</sup> out of the News and Record that Mike was able to make us aware of identified that NC was actively considering coming to Kerr Reservoir. If you put yourself in the position of one of the planners for Wake County, City of Raleigh, or the City of Durham, you would be remiss in you doing your job if you were not looking at the body of water up there. But we sitting here promulgating positions hasn't gotten us anywhere. About 8 years ago there was a meeting, or let's call it a gathering because they didn't want to call it a meeting. It was more or less put together by Randolph Jones the Economic Development Coordinator for Mecklenburg County wherein various personages came together in a room and didn't want to have to keep meeting minutes, didn't want to have Freedom of Information Act requests, etc., etc. and a discussion, which I was not privy to but I have information 2<sup>nd</sup> hand so you can take it as suspect at best. The consideration and the topic of discussion was the development of a regional water authority wherein the old Burlington Industry site down there on Carter Road, which has an intake grandfathered because Burlington Industries was there prior to the inception of the reservoir, that intake would be utilized and an abandoned railway line running through Oxford, NC would be utilized as the distribution corridor, which would take the water at least to Granville County, NC, which abuts Wake County and would get it to the metropolitan area down there in Raleigh. That fell by the wayside because there was no champion that wanted to take the politically hot potato interstate and inter-basin transfer and go through what VA Beach did in obtaining water out of Lake Gaston. The old end around or Statute of Liberty play was pulled in that Franklin County, NC was able to get water through the Kerr Lake Regional Water System wherein the Federal Government is accommodating the Kerr Lake Regional Water System being the broker for water out of the Kerr Reservoir to our neighbor to the south. So, we need to step up to the plate and be aware that inter-basin transfer is already taking place, being accomplished piecemeal and the document that you, Terry, referred was a 2006 document that according to Greg, Lee Queen was listed as the originator in the document properties and it was revised by NCDNER. Apparently in my discussion last night with the Corp of Engineers that document is not on the table at present but they would not make the statement that it was not being discussed at some level by some entity, but it was not on the table and hadn't been presented to the Corp of Engineers. This was the Environmental Assessment Scoping document, a 7 page document. It has been forwarded up the line, I'm trying to alert everybody to what was going on or what potentially could be coming. I don't know that we can close the door the horse might already be out of the barn. We need to be looking at some safeguards wherein a percentage of the total allocation of these reservoirs can be reserved for the residents within the basin and what percentage that would be I, there's greater minds than mine, but we know how much the water originates in the Commonwealth of VA and we know how much is stored in the Commonwealth of VA. If by virtue of the eminent domain authority that the Federal Government exercises, they can take our rural lands and take them out of farmland production and displace people to store the water in VA to supply NC, if that's what the law is going to be then we'll have to learn to live with it. There are other reservoirs within the State wherein the Federal Government is not involved and where a inter-basin transfer ostensibly is going to show its ugly head. There are a number of ramifications to inter-basin transfer. One that comes to mind is the treatment of effluent. If there's less volume going down stream that means higher degree of treatment wherein costs are incurred to local governments because of the reduced volume passing through the system. So, I'm just waving the flag and trying to get our

Committee and the residents within the Basin to be aware that you can't sit back and wait because the discussions are taking place to our south and documents are already prepared. The News and Observers' reporting that they're looking at Kerr Reservoir and I can't blame them, but the problem is there and I don't know whether the thrust, intent or the requirements of the Environmental Policy Act were observed in the granting, in the grandfathering of the 10 million gallon withdrawal for the Kerr Lake Regional Water System which, ostensibly this year could go to 25 million according to this scoping document. But, none of us down there knew that it was taking place other than the fact that Kerr Lake, Henderson, Oxford, and Soul City had authority to take up to 10 million gallons per day. The piecemeal, incremental, creeping of the water towards Wake County has the potential of obligating the water allocation that's available in Kerr Reservoir and having it utilized and usurped. It could forestall the economic development and the quality of life of citizens within the Basin, so it's an important issue. Maybe it's too big for any of us to tackle, but it's multifaceted. I would hope that, Scott that the regulations have an exception or a section devoted to federally regulated resources that are identified. Maybe the Commonwealth needs to step up because the rural subdivisions don't have the political or the economic clout to purchase the allocation of storage, maybe the State of VA as a whole needs to step up to the plate and get into the ball game about reserving an allocation of storage. How that could be done on a federal reservoir, I think, our legislators at the national level are going probably have to get involved. But, it's only going to be done if and when our state legislators and individuals such as ourselves bring the problem to the forefront and buck it up the line because it is important. This is something that's not going away, it is going to get worse in the next 25 to 30 years we're going to be pumping water all over this country. There needs to be some equitable distribution of the water and some safeguards established which do not deprive rural areas of the Commonwealth of their economic right to exist. Riparian Law comes into the question. Does Riparian Law go out the window if and when a federal entity comes in and condemns the source of water? Nobody seems to provide quite the satisfactory answer. Maybe it's a Supreme Court case to resolve that issue. There are a number of things here that I hope you 2 gentlemen are aware of. I know Greg has been a steady resource for getting stuff bumped up the line. I thank you for letting me get on my soapbox.

- Terry Wagner replied I'm going to push you over for just a minute John, and stand up beside you.. You covered a whole lot of issues. I mean a tremendous number of water resource issues and I don't know that I'll be able to even remember them all much less respond to them all. But, just a couple of notes. Number 1, there is no prohibition in VA regarding Inter-Basin Transfer. Inter-Basin Transfer is not even clearly defined. In the Water Supply Planning Process that you mentioned, where Inter-Basin Transfer discussions fell down was in a basic effort to define Inter-Basin Transfer that should be considered in Water Supply Planning. There was not, and this was a broad-ranging group of stakeholders as it was composed of 32 people representing industry, commerce, commercial interest, environmental interest, water supply interest, local government, the whole gamut. What you got to understand is the Staunton/Roanoke Basin is not the only Basin where Inter-Basin Transfer occurs. Inter-Basin Transfers occurs every day throughout VA. Probably the best example is the Blacksburg, Christiansburg, and VPI Water Authority that has a water withdrawal from the New River, a significant portion of which is used in the Roanoke River Basin. Some of the discharge may even be returned to the James Basin. A lot of the localities that are located near a divide have that issue. Then you step back one step further, well, what is Inter-Basin Transfer mean? Is it a transfer between 8 digit HUC codes which are big regions? Or is it a transfer between Catawba Creek and the next creek to the South? I mean, it happens. From a water resource management standpoint I would like and from a permitting standpoint, not from a planning standpoint, but from a permitting standpoint, it doesn't make any difference from a water resource management standpoint whether a withdrawal from a stream or a reservoir goes to Inter-Basin Transfer or if it goes to a consumptive use. It's still a reduction in that flow in that stream or volume in the reservoir. Our revised VWP regulations are designed to look at that issue so if we put our blinders on it doesn't matter whether it's a co-gen plant that's going to turn it into steam or whether it's a withdrawal that's coming out of that stream going to an adjacent locality. The impact in the stream is the same. So, arguably the folks in NC if we want to put a co-gen plant on Kerr Reservoir... **John Feild indicated we already have one.** . . . well, but see the impact that

we're having in NC then is the same as the Inter-Basin Transfer that occurs to us. I'm not arguing whether Inter-Basin Transfer is good, bad, or indifferent, I'm just making the point that it's not defined by legislation. We don't have the authority because we don't have a legislative authority as a department to regulate it in any fashion other than its impact on the water resources. **So you identified at least the requirement or the necessity or the need for legislation at the Commonwealth level to identify what Inter-Basin Transfer and what our elected officials think should be accommodated?** I don't know that was not my intent. **But it would identify the deficiency.** I'm not sure that, well, see that's kind of a socio-political question that's not a water resource question. The question is whether, as a society, we want to move water from one stream basin to another stream basin. From a water resources management perspective, from my perspective, what I have to look at is the impacts on the withdrawal stream and the impacts on the receiving stream. If those are not adverse impacts from a water resource management standpoint they're okay. That's what I have the authority, that's what the agency has the authority to look at. Now if there are those that want to argue that we should not have Inter-Basin Transfer, the big boys need to tell me that. The guys at the General Assembly need to say, 'Inter-Basin Transfer is not allowed in VA' or they need to say, 'DEQ will establish criteria within which Inter-Basin Transfer is allowed and is not allowed' currently we don't have that. **You don't have the guidance.** Well, we don't have, it's not the guidance, it's the authority. **Okay.** We don't have a legislative authority. Now, in regard to Kerr, I don't mean to belittle your concerns at all, but in the current operation of Kerr, there is a 50,000 acre feet that are, that can be used for water supply. Of that, about 25,000 acre feet are already allocated. **I think it's probably more than your number, but it's 50,000 surface acres. So your number would say that the only 1<sup>st</sup> foot of water is available and that is not precisely correct. In fact, it's roughly . . .** 50,000 acre feet of water is all that is allowed to be used. In the operating guidance for Kerr Reservoir, well in the operating guidance on any federal owned reservoir in the US there is a when a federal owned reservoir is developed it's developed for a purpose. Kerr was for primarily flood control, but then they're other ancillary uses of the reservoir. Any reservoir that's federally owned USACE owned in the US one of the acceptable ancillary uses is water supply. That's capped at 50,000 acre feet unless there is a specific authorization. The reason I bring that up is we're right in the middle of working with the State of NC now on a re-authorization of Kerr Reservoir, so we're looking at, you know, what uses should Kerr Reservoir be put to? Well, I happen to be the Chair of the Water Supply, Co-Chair with my counterpart in NC, of the Water Supply Work Group. **That's the 216 study?** That's the 216 study, yes sir. So we were charged with saying, 'Well how much water will be used out of Kerr Reservoir for water supply in the future?' the Corp of Engineers doesn't care where the water is used, they've got a limitation 50,000 acre feet, if you want to use it in Roanoke that's okay, if you want to use it in VA Beach that's okay, 50,000 acre feet is what they've got to work with. And what we were looking at was, 'Was a need in the region to increase that number, to have more water available from Kerr Reservoir for water supply use in the next 30 to 50 years?' Well, you know, being the good technician that I am I set down and said, 'Alright, well the 1<sup>st</sup> thing we have to do is we have to decide how much water is going to be needed in the region in the next 50 years and look at what available supplies we have, that is a water supply planning process. Well, the 1<sup>st</sup> thing you have to define is what's the region? How far from Kerr Reservoir can you legitimately move water economically, not today, but 50 years from now? To make a gruesome process as short as I can, Inter-Basin Transfer raised its ugly head. Does for VA want Inter-Basin Transfer into NC? Does NC want Inter-Basin Transfer from the region to the City of Richmond or to Petersburg? And the off-shoot of the discussions were, and not just with Inter-Basin Transfer reason at all, another significant reason was VA did not want to establish needs for the localities that could logically be served by Kerr since we had just established regulations that allowed the localities to develop those needs. So we certainly didn't want to be seen as a state agency saying, Alright Bob, you got to come up with a estimate for your need 50 years from now in Mecklenburg and then before we ask for your report in a federal proceeding to say, 'well, you know, Bob's going to need this much.' So we really shied away from developing those numbers. The off-shoot was, you know, everybody finally agreed, you know, 50,000 acre feet's probably okay for this, for this re-authorization. So, from your standpoint that's kind of the good news, it's capped. There won't be significant adverse environmental effects; but, it's also the bad news, it's capped. That means if there are needs in VA, we're limited to the 50,000 acre

feet total and already we've got about 1/2 of that allocated. **Mike McEvoy asked how is that allocated? Like the remaining 25, is it, just 1<sup>st</sup> come, first serve?** First come, first served. Put in an application and you know, quite honest, that's no different than VA. **Doesn't behoove VA in the 216 study to try to get a reservation of some order for the future economic development of the Basin since the water is stored in the Basin, is generated from within the Basin. The demands of Wake County and Durham County, and so forth with their metropolitan sprawl and the water shortages that they are experiencing, it would seem that more than likely they're going to be coming to Kerr and they're going to have first dibs at this 50,000 acre feet, that's 50,000 acres, the reservoir's 50,000 acres at normal pool, so the 1<sup>st</sup> foot of it is reserved for water allocation, if we could change the allocation or have how much in reserve for water supply and have a certain percentage, whatever it is, reserved for South Boston, Clarksville, South Hill, Petersburg, wherever 'because Petersburg is not a whole lot farther away from the reservoir than Raleigh is. Right. There's nothing right now that prevents South Hill, South Boston, Petersburg, any other, a consortium or groups in VA from making application to the Corp for that water. The main requirement that the Corp would have is that you have to specify and identify use. You can't make a projection of how much you going need. No, no, you have to make a projection. Well, you make the projection, but you can't get the allocation just on the basis that we need to have this amount of water out here in the future. You have to have a demonstrated need. You have to have a demonstrated need with the application. Bob Jean said that eliminates any future need, in other words...**

**Terry replied no it doesn't, because you're looking at permits with terms of 20 to 50 years.** I'm talking about future need of say, South Boston. Obviously, they don't, that region is not growing economically or industrially whereas the Triad in NC is. So practically they'll be no applications for additional water until probably all the water is already been allocated to NC, if something isn't done to preserve some of it for the area where the reservoir is located. **But that, if you want to do that . . . It takes legislation. . . it takes legislation.** I think that's what we need to work toward. Robert Conner stated however, in VA's work with NC, correct me, but up west of South Boston, where the river loops around kind of like an elbow, the Dan River, the Roxboro area and we discussed this several years ago was going to come in and withdraw the water it's all in NC and they don't need permission from this legislators or from DEQ and that's probably still on the horizon. However, it could affect the flow of water coming in to South Boston and that was a concern of ours and it was dropped, nothing. Read Charlton stated that a branch of the Kerr Reservoir dips down toward Vance, in Vance County, down to Henderson. I mean the reservoir itself, so the same situation applies there.

- Ann Austin said I have a few things I want to say. First of all, this is not coming from Virgil's office, rather I have been involved with this Inter-Basin Transfer issue since I think 1992. I can remember that the legislation in the state was tacked on to another Bill right at the end of the session and it went through. We had citizens groups that were working on this. Unfortunately the head of a particular citizens group who was very much against it, had cronyism, had a particular lawyer who was not as effective, did not want a riparian rights lawyer who had done a lot of work in California to come on pro bono. But I'm hoping we can learn from what happened 15 years ago. I talked to the Attorney General's office in NC at that time and he was very against it then, because this is going to VA Beach, hey, I'm all for it, but they didn't feel like they could do anything. And, of course, it ended up in federal court, I went to the hearing in Manchester Court, I don't know if any of you've been down there. Anyway, at that point nothing really could be done, it had gone too far. You know how many years it took and it went through the loopholes, excuse me, not the loopholes, but it went through pretty quickly considering what the process went through pretty quickly. I just thinking that the people in NC because part of the reservoir is in NC they're not going to listen to us on the state level, they can basically do what they want to, am I correct? Am I right about that? **Terry replied yes. We could make any citizen in VA or any agency of the VA government, could make comments on any proposal that would have a direct impact on it.** But it's not going to affect their legislature and however they want to vote on it. John Feild stated your comments could affect the 216 study. And what comes out of the operational plan for Kerr Reservoir. **Terry did not think that there's going to be a water supply component to the 216 study.** Well there ought to be. **Well, be careful what you wish for**

because you don't want, well, we were told very clearly by the Water Supply Planning Technical Advisory Committee that the locality did not want the Commonwealth to tell them how much water they would need in the future. I can pretty much assure you, you don't want, if you don't want me to do it, you don't want the guys in Washington, DC making that decision for you either. VA has historically relied on the expertise of localities to establish what their land use patterns should be and what their needs to support those land uses should be. You changed the dialogue wherein we don't want certain entities telling us how much water we're going to need and maybe that's correct. However, there's nothing on there that reserves any of the allocation and we do need some element to step up to the plate and say, we need to reserve a certain percentage whatever that percentage number is, because the economic viability, the quality of life, riparian law, all of these things come focused. Yes, the federal government condemned the property, ran off the owners, stored the water as an ancillary part of their authorization they can use it for water supply. But it is a government for, by, and of the people. It's not the Corp of Engineers or some bureaucracy. And if the people say we need this for our economic viability, and for our health and for our quality of life it's only right that a certain percentage of that allocation be reserved for the residents within the Basin. I'm not a lawyer, but there are lawyers that could put the pen to the paper and draft some type of legislation that would guarantee the citizens within the Commonwealth or within the Basin a fair share. That's all we're asking, is a fair share of the water that's there. We don't want to deprive anybody that's going to be suffering from lack of water, I mean, this is the United States. We're going to be seeing, as you've already indicated, Inter-Basin Transfers taking place all over this country and there's already dialogue and confrontation between SC and NC, there's Georgia, Alabama, and Florida; there's Tennessee and Kentucky. These are the opening skirmishes, hopefully we don't get to the level . . . **I'm right there with you.** ...but it's only going to be through the proactive actions of people such as yourself that were serving on the 216 study, who have a voice in that, who say, we don't want to get into that say, well, we need to get into that because the water allocation is important. And for Frank Ruff and Tommy Wright to say, we need some guidance at the state level so that DEQ can promulgate whatever they're going to promulgate and from Virgil and our delegation in Washington that says, alright, the operation needs federal reservoirs and the process by which the allocations are made, there needs to be some protection for the citizens. **Okay, there's 2 issues there you see. Inter-Basin Transfer which is not specific to Kerr Reservoir, right, so that's one issue you need to deal with and then the use of a federal facility is a completely different issue. You can deal with the Inter-Basin Transfer issues in State legislation. You can't deal with Kerr with the operation of a federal facility within State Legislation.** Ann Austin stated that she had 2 more points. One thing, I don't know if you remember, Henderson, quite a few years ago, wanted to tap on, not for their own sake, but so they could start selling to Raleigh. I don't know if you remember that. VA Beach could have bought water from Norfolk in 1992 or '93, but they did not want to buy. Norfolk had plenty of water. The other thing is it is going to take a long time, you know, what's happening with the Mattaponi in Newport News. He's going through the hurdles. But I agree completely with you. Legislative services can write up, probably after the session, legalese for what you determine is good. But I think we can write all we want to NC can do what they want to so it will have to go, as you say, to the federal with all our support behind it. Amen. Haywood Hamlet said I want to ask one quick question to clarification on my part. Are you saying that the 1<sup>st</sup> 12 inches, the 1<sup>st</sup> foot, right, does it or doesn't it matter where the water level is, or is that at full capacity? **No, no, no. 50,000 acre feet is a volumetric measure. So, if the lake level was at 292, it's still that volume, 50,000 acre feet. If it's at full pool, it's still that volume, 50,000 acre feet. It just so happens that Kerr is about 50,000 acres in surface volume at full pool. The 1<sup>st</sup> foot has got nothing to do with it.** Read Charlton said now, let me ask you John, regarding this question of Kerr Lake being owned by the federal government i.e. the Corp, Gaston Lake is almost entirely below the NC line and that is not the Corp, that's Dominion Power. Right? Now does the same question apply there? **John Feild replied well, the allocations for water for VA Beach and for all the other entities are in Kerr Reservoir. Lake Gaston is a run of river Reservoir. The head that is provided by their dam is to operate their turbines. They don't have the authorized purpose from Congress for Lake Gaston other than, whatever the agency, FERC, the Federal Energy Regulatory Commission and they tasked Dominion Power to go through the full blown environmental**

impact statement process and identify all of the various parameters that Dominion was tasked to spend countless sums looking at every whim that could be brought to the table. I participated in that some. So, I've been exposed to some of this but it would seem that common sense would require some type of legislation. Ann has indicated that and that's what you've recognized that it would take it, so I think we're on the same page. It's heartening to me that you have been involved in the 216 process. We were invited to about 2 meetings as a stakeholder and then maybe because we, let's put it sweet, maybe they lost our mailing address, but we haven't been and I understand that the process has been somewhat dormant due to lack of federal funding. Terry nd state fund and matching funding. So maybe they've gone into hibernation, maybe it's not willful, declined to invite us back anymore but this body was invited at least 2 sessions, I went down there to Raleigh when I was Chairman and was making those runs and they, they have a number of very intelligent and well-informed people present in that thing and they are tasked to look at anything that's brought to the table and then they have a committee that says which ones are going move forward and be presented and we just had one that the State and the Corp were successful in putting the dampers on was the raising of the operation level of Kerr Reservoir by 4 feet. On one side that would give more water for ostensibly that could be used without a negative impact. But impacts associated with raising the water 4 feet carried the day. Read thought that plan would have flooded some campgrounds. 800 miles of shoreline you raise it up in the flood pool. That's another horse and we've got to eat lunch. Thank you for the dialogue and I appreciate your indulgence. We are going be monitoring what's going on. We are going be promoting legislation. We are going be talking to any entity that will hear us because there are some basic issues as you have acknowledged that are probably going have to go up to at least the federal level, maybe even to the Supreme Court as we get into who has primacy on the federal operated reservoirs and whether the State has any authorities. The State has authority over fish and game which are resident and inhabit the reservoir and whether wetlands law applies to the federal government in the operation of their flood control projects. The mitigation of stream, 'because I've been involved on the other side of that coin applying for permits on a golf course and I know the cost that DEQ has installed \$400-600 per linear foot of stream impaired. So there're a number issues here and as a representative from the Clarksville and the lower basin where Clarksville resides in the basin in VA. We do have some concerns and I realize that our situation with the federal reservoir makes us somewhat unique and the water supply planning process was designed to accommodate the 90 to 95% of the rest of the residents of the Commonwealth. But there might be the need for a little subscript a P.S. to the legislation that acknowledges that fact and at least gives a warm and comfortable feeling to those entities that are tasked to spend \$60 to \$100 thousand dollars developing a water supply plan that they're not throwing their money away. Terry stated the one thing that I would say in closing and recommend strongly is that if you want to approach the Inter-Basin Transfer issue don't try to go it alone. If you want to propose legislation, I would strongly encourage you to work with other river basin commissions or planning district commissions throughout the State so that you have a consensus view of what should occur in Inter-Basin Transfer that you're bringing forward. Remember, you'd be talking about State legislation that ostensibly would affect not just the Roanoke River Basin, but may affect others. So just be aware of that or structure it so narrowly that it only addresses the Roanoke River Basin. I think you would have a better chance at success with a broader consensus. **Well we're getting beyond the purview of our committee because we are the VA Roanoke River Basin Advisory Committee.** Mike McEvoy believed that Terry was saying that if we narrowly focused on the Roanoke there are other interests to satisfy. I kind of think the fact that the reservoir is a federally controlled actually is a positive because there are some procedures and regulations in place and if not it would just be a straight state to state fight, so I think actually it's positive.

## Dean Gall, DCR, Soil and Water Conservation District Collaboration with NC:

- Next up we have Dean Gall. From the Department of Conservation and Recreation and is the, let's see, both the New River and Roanoke River Watershed Regional Manager.
- Well mine will be quite brief today so that's the good news. Although I will start this out having only been involved with this group for less than a year, all this history that gets talked about today especially with these water regulations and having some individual conversations with Mr. Conner and Greg about what this groups' intent was when it was established is a little bit of mystery to me, especially with what I'm going to discuss with you right now. About 5-6 months ago Manley Wilder, the head of the Department of Natural Resources in NC had run into Jack Frye, our department's Division of Soil and Water Director, and stated that the soil and water districts in NC were interested in meeting the soil and water conservation district employees in VA. So we in VA worked with staff from NC to set up a meeting and we held it in the early part of December of last year. And the intent of this meeting was to find out what the districts were doing on both sides of the line. What best management practices, what kind of efforts were they directing their employees to be involved with on the landscape on both sides of the state line? We were interested in finding out how the districts were funded, in Carolina, as well as here in VA. What kind of budgets did these districts have to work with, and how were the districts to function. In VA they're set up to work in the federal offices within our NRCS. In NC they're very closely associated with the counties so there were some differences there. Financial-wise in recent years, because of WQIA funding, VA has had a significant amount of money larger than what NC has had to work with. I think they have the longer track record of having money than us. The group decided that they wanted to meet again. It was very interesting to find out that we are working on similar best management practices. Here in VA we're working with EPA Region 3 out of Philadelphia, whereas Carolina is working out of Region 4 and the different regions don't always do things the same. So another one of the factors of getting these groups together is NC is interested in applying for some federal money and they think it would be advantageous to do it as a bi-state approach. The interesting thing about it would be that we would be working with 2 different EPA Regions, which everybody kind of looks at as being a challenge within itself; but, we think the strength of 2 states going after some money to get district work done would be to our advantage. So there will be another meeting. I think NC especially is interested in this because they do want to bring in more funding and we have not, in the last couple years, pursued a lot of additional funding because we've had it and right now we still have money. But as of the 1<sup>st</sup> of July we don't have any money unless this General Assembly comes through with some legislation that will provide additional support for us. So here are 2 departments that have talked together and met, granted it's on water quality issues, that are trying to work together to find some common ground. They want to find out what different projects we have going, how we're doing our work, and are we doing the same kind of work. This is primarily associated with the Dan River Basin which is part of this Roanoke River Basin and as that river snakes in and out of VA and NC, are we applying the same set of rules. Interestingly enough the landowners in NC are aware of some of the rules that we have in VA. We promote 35-foot buffers and they promote 10-foot buffers. What kind of impact does that have on the efforts that we're putting forth? So, it'll be interesting to see what comes out of this and to see if we can't generate some funds from EPA. So there are communications, but it's maybe not where this group initially intended to start. But it was at the state level and who, as I've said to Mr. Conner, I'm still at a loss as to whose idea it was that the head of that department contacted Jack Frye to start this process so I don't know. Anyway, it has started and it's a very interesting thing.
- Mark Wagner said I have an accolade. I know in our area, which is Bedford County, that every project that I've done with Soil Conservation and/or the Farm Service Organizations, I have had over 4 different county or 2 separate state people involved. When they come out to lay out the project there will be 3 or 4 people from different counties or they'll have somebody from NC or a student from Michigan or whoever helping. The best cooperation of any organization government run that I've ever dealt with on my farm since 1976. But the water quality projects, our county's

working on a 50-foot buffer more or less on these mountain streams where the cattle are involved. But those 4 people will sit down with you and say, 'Look, here you've got this sandy loam and you've got this, if we put a riparian buffer in against a fence, we can narrow things down or let's make it larger here and then on top of that they sit down and pay you for all the land that you take out of service. So, from that standpoint, it really is nice to see people that do communicate. I can tell you 1<sup>st</sup> hand that state to state and county to county in our area.

- Read Charlton asked with the best management practices for both agriculture and forestry don't they promote a 50-foot buffer? **In our area that's what they're after is 50-foot from the creeks. And that also depends on the type of slope of course. But, on gently rolling land a 50-foot buffer's what they're promoting in our area.** Now, as far as conservation easements, your property, if you have a stream going through your property, they require a 50-foot buffer. **Well, they require a 50-foot buffer over the whole plain of the stream. If the stream meanders, you know, they take a block in other words. They come down with their GPS and block it off.** Do they? **And then you have a wide variety of lists of things you can plant that create better buffer zones and others and they work very well together. All the people seem to have input and will even take you to the other counties to show you the projects and especially different watering systems that won't freeze and what they've done for different areas whether you have a rocky area that's very steep and you don't want any run-off. It's worked very well in their area.** That issue came up, this committee met up at the farm at VPI a couple of years ago. They gave us a demonstration up there at that farm, the VPI farm, about the buffer, the vegetation along the creek that ran through this rather large pasture and they also had a ford there that how it could be constructed so you could drive a tractor across and also a little bit on bridging. **They allow us to put fords in with minimum 4" diameter rock. It's actually just a ford but my biggest concern, I' right above the new water treatment plant that went up in our area. Any run-off that comes off of my farm is directly under scrutiny because of the water treatment plant so it will curious to see how it all works out.** Dean indicated the buffer widths are dependant a lot on which program that you're working with. If you're working with CREP they will pay for buffers that may be a minimum 35 feet and all of them are at least 35, some of them are wider, it just depends on the program. **Read wished we had put that in place 50 years ago. I can remember farming in Charlotte County, we ran cattle down in the creek.** Well, they still do in our area too. It's not a mandatory as you have to go and apply. Haywood Hamlet asked what was the one you named just now. CREP. C - R - E - P. **Also, EQUIP.** Well, EQUIP is a federal program. That's what I am in and I have 35 feet buffers. **EQUIP, what is that?** It's just what it's called, the program. **Moir Croghan identified EQUIP as the acronym for Environmental Quality Incentive Program.** That's a federal government program. **CREP is Conservation Research Enhancement Program.** Bob Conner that's what I am in. What ever it is we fenced off the streams and ponds and put in watering. What I liked and we talked briefly Dean, is that the 2 states, DCR, you got some communication and cooperation and both have the same interests. If we look at the streams, my streams and ponds are closed off now. 2 years ago my ponds were not clear the overflow goes to lake Gaston. Now the calves are not in the pond up to their waists so I feel its clean. It was intent of this commission to do the same as you all have done NC and we've not had that opportunity so, I wish you all well and I'm encouraged that at least something come about in the soil conservation and working with the 2 states together there.

#### Committee Structure:

- Before we move on to Committee Reports, there's a couple of housekeeping items I want to make sure get addressed. We need to deal with some leadership issues. Right now we have a vacant Vice-Chair position. For those of you new to the Committee, we have a Chair and 2 Vice Chairs. Our current Chair is also now a Delegate. I don't know if he's indicated to you, Greg, if he wants to continue as the Chair or not. But we probably need to form a nominating committee.
- John brought up the issue that the legislation probably needs to be addressed in that most of us old hands on the Committee are term limited to 3 - 2-year terms. So a good portion of the experienced



members on Committee is going to cycle off about the same time unless a change is made. I probably feel like we could work with Senator Ruff to introduce something but as he indicated, it's probably too late this session, but we might want to do something for the next session. **Greg stated I have notes on all this back at the office but I think originally the legislation came out in 2002 and people were appointed. The next year everybody was re-appointed as the legislation was changed. This started terms over. Initially, the legislation appointed some for 1 year and others for 2 years. This was to stagger the terms to try to head off the problem of everybody coming off at the same time. So with the 1<sup>st</sup> appointments and the extra year granted when the legislation was done over we have people serving from July 2003-June 2005, July 2005-to June 2007, and July 2007- June 2009. So 2009 is when this will first hit us. Then we'll have some serving from July 2004-June 2006, July 2006-June 2008, and July 2008-June 2010. Roughly half the original Committee will come off in 2009 and the other half in 2010 as the legislation currently reads. We have a little bit of time if it gets done for the next session.** I guess, given that, you know, only half of us will be cycling off in 2009 possibly. Maybe the fix is not as complicated as believed. **Haywood said these 2 gentlemen here who came on replacing people who have resigned to step down what is their status.** Greg indicated if they replaced somebody that resigned in the middle of their term, that term would be finished and then their 1st consecutive 2-year terms would start. If the resignation occurred at the end of a term, the new person would start their 1st consecutive 2-year terms. **Bob Conner mentioned it doesn't count that you finishing out the person's term.** That is correct. **Haywood Hamlet asked about Dr. Cutler.** Greg replied he resigned. **Do we have anybody to take his place?** No, but I was talking to the regional PDC, Roanoke Valley-Alleghany PDC, yesterday and learned that last night at their meeting they were going to discuss recommendations to fill his vacancy. **Mike asked Greg, would it be too much trouble to, I guess, to circulate the roster with maybe, what you think everyone's service has been, kind of updates for everyone, so we kind of get a feel for who's off when?** No, I probably have it updated for most years. I just need to add in some things. **I think that would be helpful. Alright, maybe we can then pursue this is at the next meeting after everybody has a chance to look at that data.** Bob Conner mentioned that he would like to see some recognition for the members that have resigned for whatever reason. They gave up a lot of our valuable time traveling up and down the Roanoke River Basin and I think it would be appropriate if we could invite them to our next meeting and recognize them. **Read Charlton replied that is an excellent idea.** Mike stated with regard to the offices, do I have a volunteer that maybe wants to put together a nominating committee? **Bob Conner indicated that generally a Vice Chairman would move into the Chairman slot so we may be looking at filling at least one Vice Chairman slots.** Haywood Hamlet asked has Charles expressed himself as to what he has in mind. **Greg indicated it all needs to be sorted out. Another issue is that Delegate Hurt is now Senator Hurt. Senator Hawkins has resigned. I have been told by the Deputy Clerk of the Senate that re-appointments will not be done until after session.** Mike McEvoy replied I think as a courtesy we ought to talk to Charles and I'll do that. I'll talk to Charles and then maybe depending on what he says, get Greg to circulate an email, with a listing of who has time left. **John Feild stated it would seem premature for the nominating committee to start operating not knowing what the outcome of that dialogue is going to be. Should we have enough time frame left to, if we get a resolution between now and our next meeting, then a nominating committee could be appointed and functioning and present a slate at the next meeting.** Let me talk to Charles and we can work on having a slate for our next meeting? We also need to look at our committee structure which has kind of fallen a little bit by the wayside. We probably need to look at designating some Chairmen for these committees and determine what areas we want to focus on.

#### **Committee Purpose:**

- Bob Conner stated I'm like some of the other guys around here an old timer on this committee. I wouldn't take anything for the fellowship and working relationship with my fellow members. I think a lot of us have shared our concerns along the Roanoke River Basin. We were appointed to represent and serve the people along the Roanoke River Basin and their concerns. We have talked about NC where the 2 committees would meet and then the Governor had appointed some people

on the Bi-state Commission. Dean asked me earlier at lunch time, and I sometime shoot from the hip and my gut feeling, what was the purpose of your committee being appointed? I'm just giving you my opinion and you may have your opinion. Lake Gaston Association and a lot of other organizations along the Roanoke River Basin were putting a lot of pressure on the State representatives in VA about what are you going to do about what's taking place on the Roanoke River, Lake Gaston, Kerr, etc. And they were constantly being blasted at any meetings they would attend. So I think they came up with an idea for this Committee to represent the Roanoke River Basin and take some of the issues out of the political arena. We have preached many a times at our meetings when is NC going to meet with us and when is the Bi-State Commission going to get going? And we get no answers. We don't have anybody that we report to, we really don't, so we meet every 2 to 3 months and we support each of our concerns along the Roanoke River Basin. We came up with the 1<sup>st</sup> good piece I thought of legislation that could be passed on, that there was to be no inter-basin transfer of water to the detriment of the people of the Roanoke Basin. We can beat our heads and come up with everything and anything. Until the legislators agree to put it out there and get a vote on it, we are spinning our wheels, other than to work with each other and to be concerned about each others problems. I'm addressing this to some of the young guys. I have a feeling but I have not talked to the other members that resigned, that they may have felt burned out that they were spinning their wheels. If we're not getting anything done, we should stay at home. I don't know how to get through to the legislators that when we vote and agree on something, and pass it along, it never goes anywhere, it just stays. **Bob Jean asked well who does this committee report to? Nobody! Absolutely nobody! John Feild stated the annual report does go forward to the Governor and to the General Assembly. Now whatever use they make of it, that is suspect as Robert's indicating. But, we do have very comprehensive annual report and it's impressive to see. Bob Jean asked do you ever get any response back concerning it? Robert Conner answered no. I daresay that if you asked, if the governor read that report, if somebody else read that report, the answer would be no or they would tell you, 'Oh yeah, I saw it' but they couldn't tell you what was in the contents of it. So I'm going to stop. I had thought at one time about just giving up and spending my time elsewhere. Too many of us have worked on this thing together as partners to see this thing go down the tubes and I think we need to continue to push. We need to start tightening the screws a little bit. Either you take some action or do away with the committee. We could form our own committee and do the same thing. So, I've talked enough on that. We have preached this year in and year out. I have a feeling that some of these guys that gave valuable information to this committee probably got tired of coming to the meetings and seeing no action. We could vote this afternoon on 15 things that we want to do along the Roanoke River Basin and that's as far as it would get. It would be covered in our Annual Report. John was preaching this morning on Kerr Lake up there, if we could just meet with NC committee, we could resolve a lot of issues and come to a consensus. We could really make a difference if we could meet together but I don't know that that's going to ever come about. The lady that is the Chairman of the Water Study Committee in NC represents Warren County, Northampton County, Lucy Allen. I've called her to see about meeting and never got any calls back. I've left word with her legislative aid to call and see if we could get a meeting. Now she's chairing the whole state water thing which is in the makings of getting water from Kerr Lake. Mr. Chairman I appreciate you allowing me to express my concerns. Haywood Hamlet said I am just basically echoing what Bob was saying. I too, I've enjoyed my tenure here and sometimes I think about stepping down as well, but then, you know, I think about all the good people I've met, places we've been, the different things that we've seen, the concerns and everybody's area. We have been to Gaston, we've been Smith Mountain, we've been to Roanoke and wherever, but he's right, you know, without calling any names, we've got some people who have left us because they were burned out with it. They felt like that they weren't getting anywhere. They had a lot of irons in the fire, more than I do. I guess that's one of the reasons that I still hang on. I do feel like we're spinning our wheels and getting nowhere fast.**

- Charles Poindexter arrived to the meeting. John Feild told him we are doing some soul searching and reviewing what purpose we're serving. Who we report to and what is coming out of the reports that we do make. Are we just constituted to be a hush committee that serves no function

but to take the heat off of elected officials. This is some of the sentiment, if you don't mind me encapsulating. Some of us old hands that have been there since day one and you're one of them. I too have toyed with resigning and I know that some of those that have resigned, what's behind it. As the 1<sup>st</sup> Chairman without too much guidance from anybody, I thought that we were working to get our 3 designated representatives to the Bi-State Commission, Hayward Hamlet, Mike McEvoy, and Watt Foster, educated and appraised of what the issues were up and down the Basin and to get all of our committee members cognizant of what was going on up and down the Basin so they'd have an appreciation of how things are impacted. How the domino effect takes place within the Basin. I think we accomplished those initial objectives. We did build a wealth of information and we got exposed to a number of things. We have an understanding of how the farm run-off up in Bedford County affects the lower part of the Basin and how the recreation in the lower part affects this, that, and the other. Also there are the water supply issues that you've heard me talk on today. If it were not for the importance of some of the stuff that we considered, I too would have joined the mass exodus. We've been sitting around the table here with a bunch of people and say, "Well, what are we here for?" Legislatively we need a fresh approach, we need your cohorts over there in the House of Delegates, and I know you being a freshman member don't have but so much clout, but you need to grab them by the arm and say, "We've got this committee out there functioning and if we're not going to support them they're going to evaporate." **That's exactly what I plan to do after session. I'm going to sit down with these other legislators. The issue there is that, near as I can ascertain, Charles Hawkins was probably the biggest advocate for this committee. Some of you may look at that a little different, but that's the perspective of the other legislators.** Bob Conner said if I can interrupt you, I thought about him, he was the backbone really. Whether it be Republican, Democrat, whatever. **Right.** . . . Senator Hawkins was here to support us and fund us and so now we have lost that. **You're not interrupting. We've lost that and to me, I mean, what I propose to do is simply sit down with the other legislators that are on the committee and say, "Okay, Charles is gone, this is where the committee is, this is what we've done, what are your thoughts and my thoughts?" And try to work it out among the 6 legislators here in VA and Congressman Goode. He's in Rocky Mount and I have full access to him most times on the weekends. I want to see if we can gain a consensus among the legislators of what we should do or not do or where we should go or not go. I have some of the same feelings that's one reason, I think, in the last year we into things like Brownfields and some of the other things that we thought we could have an impact in. We could, the charter is written pretty broad. But we're not going to accomplish much more without some direction and strong support from the legislators.** Mike replied I think the irony too is that we may finally have an issue to address with NC. **Bob said I think the thing is now that you've been on our Committee, you know what the frustrations are. This morning, Terry, when we talking about inter-basin transfer....that was one of the 1<sup>st</sup> things we did. We have, we said that's in our meeting but it's nothing on record. That they haven't even addressed the issue over here and this morning, Terry, whom I think a lot of and is very confident man and he had a point, he says, "you need to make sure you with the whole state of VA on that. But, to my knowledge there no other committees along the Appomattox Basin associated. We were formed the Roanoke River, so we talking about the Roanoke River Basin not James River, the Potomac or whatever it is. If we make a recommendation, my opinion is it should go to the General Assembly or a committee, that committee brings it out of the committee and then it's up to them to act on it and then you feel like you've done your job, we put this out there to the legislators, they've voted on it.** Bob Jean replied at least an acknowledgement that it's looked at. Bob Conner continued if there's anyway that you can use your influence and I think that's where we get frustrated on it Charles and you've been that way. So now whatever influences you can use to meet with the committee members that are on here to get it to the General Assembly. If they're not going to listen to us, then we don't need to be appointed, we can work our own committee amongst ourselves.

- Charles Poindexter said just for my information, how serious is the issue down in NC? I couldn't be here earlier. They're already pumping water, right? **Yes, sir.** And with that pipe can it get it really large? **Mike said I guess what Terry was kind of indicating was that the newspaper article that I had seen noted that the state agencies were reconsidering their policies on**

**Inter-Basin Transfer.** He kind of indicated that they really were looking at allocating the state's resources to different cities. But there's always been this ongoing interest between, you know, Raleigh somehow tapping the reservoir there; but, I guess the bigger issue that really came out of the discussion was that the Corp does set aside some volume of water out of Kerr Reservoir for water supply and about half of that has been allocated and the other half is unallocated. And really it's just kind of a race to get that unallocated piece really when it comes down to it. I think Raleigh's looking that way. Bob Conner thought if we'd had this years ago before our legislators effected inter-basin transfers it could of been addressed one way or another. The other key ingredient is that if NC had gotten their committee worked up, as we are, and the 2 committees sat down around the table, I think we could have worked out our differences across the border and come to a consensus that, yes, you do need water, this is how much. But it seems, and we've talked about it a lot, that since they didn't want to meet, they didn't have their committee, they did their thing around the back. It's all about trust. I think things with VA Beach would have gone better, even though they're good neighbors now. They give over \$200,000 a year for hydrilla more than the State of VA. So, it's a lot of things I've learned in my older age that, you know, it's not always my side or what I think, I've got to give a little bit, and get everybody to give a little piece of that pie. So, anyway, I know you'll help us anyway you can. **I will. What I have been hearing in the last session and what I'm hearing this session is it's really coming down to regional issues. Northern VA, Tidewater thinks they have to have more water and they have the votes to do it. That's the principle reason I'm reluctant to disengage with this committee, because I don't know of any other defense going there, any other effort that we can gain any attention. And there are some policies at the state level, let's face it, straight out of the Governor's office that they can claim water wherever they want it. That's working against us.** John Feild said the word is everyone and that includes the citizens within the Basin that it's going to take federal legislation, in my opinion, to affect the setting aside of a certain percentage of the allocation that's available because politically we don't have the strength. Economically, financially we don't have the strength to compete with the large municipalities. Unless there's something promulgated by law at the national level or by the State legislature restricting governmental controlled and operated reservoirs we're at their mercy. We're just, that right, we're at their mercy. **Bob Jean stated well, if it's 1<sup>st</sup> come, 1<sup>st</sup> serve, certainly there are areas in NC in present need by time we ever got around in Southside VA to need it, it would all already been allocated.** Charles replied that's the problem, the permits have been let and then you go after a permit yourself and there's not enough water, oh, it's already permitted. You hit it exactly. **Bob Conner stated we have the Roanoke River Water Authority of which I'm a member. We've committed 4.6 million gallons a day. So if they come in with an allocation on the Carolina side and got a withdrawal from there, how is that going to affect our future use and growth for economy in the Mecklenburg, Brunswick, Halifax area** Mike McEvoy thought it was worth another shot at contacting NC. I think we need to make another overture. This summer I think 8 law suits were filed between the states in FL, GA, and AL etc. I think it's worthwhile contacting the state again, the State of NC, and trying to say why don't we have some dialogue on a more, be on a friendly level, before someday this devolves into a major law suit. **Bob Conner indicated that he would, and maybe others too, follow-up with Lucy Allen since she's the Chairperson of the State Water thing there trying to resolve the issues.** John said we've got 2 Democratic Governors on both sides and they ostensibly talk to each other sometimes. If it gets a high import associated with it and I would think that based on the number of times that the Governor of NC has been in the news media and hopefully the Governor of VA is cognizant of the problem and the need for our state and Commonwealth to step up to the plate and not get a done deal before we even develop positions and so forth that it's imperative that some type of dialogue start taking place. Then maybe some of the grist that we chewed on for 5 years will have some meaning. **Charles indicated that he had access to the right people on the Governor's staff to bring that topic up for discussion. Is everybody okay with me talking with the other 5 legislators after session?** Bob Jean replied they should appoint you as our liaison with the General Assembly.

**Further DEQ Board Discussion:**

- Charles Poindexter stated there's another issue that I need some input from and I think some of the other Delegates and Senators too and that's the proposal for the combining of the Water, Air, and Waste Boards. There's 2, 3 Bills on that this time. **John said there was a good presentation on that this morning. We haven't adopted a position and they indicated it's still early in the game. The discussion indicated that there was a jointly sponsored bill that seemed to meet the requirements and seemed to be the favorite of the 3. But there was not a consensus.** Mike said before we get off the subject of consolidation, does anybody have any strong opinion on this. Essentially what the DEQ staff member was telling us this morning was that there's a number of bills floating around, none of them have even gone to committee, but the 1 that seemed palatable to most people was to keep 3 Boards as they are with maybe some rules that would make them all consistent as far as their operation and the things that they do. **Charles Poindexter mentioned the number of members, how they operate the process would be consistent and I'm also hearing a lot that permits would be in the hands of the DEQ Director.** Bob Conner brought up funding, it's easy to come up with all the stuff and not have the personnel to issue permits and so forth. They say there is no impact but I know for a fact that DEQ's had problems meeting payroll at times and had to get money from somewhere else. **Charles said administratively we're receiving a good number of complaints about the time to process things.** Mike asked does anybody have any particular feelings one way or the other about the different Bills he talked about? **Bob Jean said he did say that it looked like more people were in favor of keeping 3 different Boards instead of consolidating all of them together.** Bob Conner said correct me, Greg, the way they set up now is the Director of each one of those, right, like they was the Director of DEQ? **Greg replied there are 3 separate Boards and they all operate in a different fashion.** Bob Jean said the consensus seemed to be to have them operate in the same fashion. **Greg indicated HB18 kept things the same as the one last year. Delegate Hogan's Bill changed the membership of the other boards so that all the different boards contributed a member to each other. For example the Waste Board would have a representative go to the Water Board and to the Air Board and then vice versa so there would be some commonality between the Boards. Also each would have 7 members, I believe. House Bill 1332, which was submitted by Delegate Landis, it looks like the focus group report which is covered in the handout. And the last thing I remember, let's see, what that Bill does, it gives more duties to the Waste Board and allows public hearings and the Director can refer the permit up to the Board if it's applicable. He said that none of these Bills have made to the committee yet, so he really had no idea which way it was going. It could change as early as next Monday that they have some idea what direction it's heading. His best guess was that it would be a compromise and the one that passed last year was pretty much out.** Moira Croghan said I think one critical thing about the Bills is whether the final decision to issue the permit lies with the Director or with the citizens. There has been a strong tradition in VA that the appointed person by the Governor doesn't have that right, rather the citizen boards do. Amongst all these Bills that's another critical thing. Where is the case decision made? Who makes that decision? Is it the citizen board, who's supposedly a board of your peers or is it the appointed official from the Executive Branch? And, so that's one key issue in one of these Bills as well as trying to simplify and line up all the administrative differences between the Boards where I think they want to make them more similar. I think the key thing is decision making about is a permit issued or not and what does permit look like? **Greg said that is that's a good point. They held the planning sessions with the public, which is that report there, and there was no overall consensus reached and, but there was consensus reached on making the Boards the same in that report and also everybody was leaning toward the idea of having separate Boards. So keeping the 3 Boards in existence instead of 1 Board.** Bob Jean said there was some discussion about they would maybe compromise and have some of both but somebody would have to make the decision as to which one the DEQ Director decided on and which one, I took it to mean, just little routine things the Director could decide and more controversially, but I don't know, didn't get how you would decide which ones were the citizen board. **Moira said she thinks the Director has the decision making authority whether it went up to the Board or not and then he could decide whether to take the Board's recommendation or not, but he didn't have to, I'm just using 'he' thinking Dave Paylor.**

John Feild stated yes but he had to justify why he did this. **Greg said it seems like if there's significant public comment and outcry then it would probably go up to the Board.** Bob Conner reflected as I look back over the years when I was going to school here and worked part-time at DMV, they had people in the state, they were promoted from within. Most of the Directors were people that had worked their way up through the ranks. No disrespect to DEQ or the Water Board or whatever it is, the Boards have people on there that are politically appointed. I could go on there and I know absolutely nothing about Air pollution, but because I'm some political whatever I get on there. I really think that at one point I thought, well if the final thing should go to the Director. However, you got Directors out here now just like me. I don't know a thing about pollution but I got appointed as the Director of DEQ. No disrespect but I have to rely on my staff, who are professionals to tell me what to do. So I'm caught betwixt and between on whether the Director signs off on it or the Board signs off on it. I've relied more on what Greg would tell me on a subject matter than anybody else. He's come up, he knows, that's his profession. He knows what will work and what won't. Bob was there when we were on the Board of Policy thing and I thought he was a great guy. He had left and he'd come back, but now he's gone. It's all political appointees in there now. My wife worked for the Department of Agriculture, everybody worked up through their ranks in there. If you became the Director, you'd been out in the field. You knew how to handle the issues. **Read said you knew the issues. If you were the Director you would know the issues.** Mike McEvoy stated the current Director is a career employee. **Greg added Director Paylor has been involved in all 3 of the medias, that is air, water and waste. He came up through the Water media and he's gotten experience in the Air and Waste over the last 10 years.** Read asked wasn't another thing that this fellow this morning mentioned, a member of each Board has to attend the meeting of another Board? **Mike said that was one of the proposals. He didn't make any indication of how that was going to go.** Bob Conner said my opinion, just thinking out loud, but if the legislators are looking for some type of advice, it's easy for a Delegate to go in and put a Bill in the hopper and another wants this and another wants that one, why don't they talk to Greg? Why don't they talk to Scott? These guys that are down here that knows what's going on. They'd get more information from them because the Directors are going to tell them what they want to hear and not buck the system. Guys that are in the trenches and been out there doing the thing, maybe I'm preaching to the choir but they're really the ones. They're the ones that know, will say, 'Hey, it'll work or it may not work or maybe you ought to give it another year before you do anything on it and let's see what we're going to do. **Charles Poindexter said yes, but Bobby, in all fairness I can go pop a Bill in the hopper and that's easy to do, but when I'm trying to get it through subcommittee or committee DEQ will be there, DCR will be there. Whoever will be there to talk, even at the subcommittee level. There is input from the bottom up. You won't get a bill through without their perspective. But do you have the Director there or do you have the guys that do the work.**

#### Other Business:

- Mike stated we need to look at some officer appointments but didn't want to make any changes until we had a chance to talk to you. **Charles said I need to look to see if it's a conflict of interest for me to even serve any longer too. We will need some kind of nominating committee. The 1<sup>st</sup> thing is to see what the direction is that the legislative members have. We can do that in March. We'll get out of here, I think, on time, you never know.** While we work on resolving those issues we will put this as an item for April or May meeting..
- Haywood said Bob Jean asked me coming down the road about a topic HL7. **Mike asked what's the topic?** Bob Jean replied it is the flow downstream below Smith Mt. Dam. **Greg indicated that has to do with the FERC license.** Charles Poindexter stated there is a re-license process going on with AEP, the power company, with FERC as the controlling agency and there appears to be an agreement that there will be a sort-of a sliding protocol implemented to address low flow in and low flow out. It may not be where either party really wants it yet and we won't know until FERC actually signs on the bottom line. **Bob Jean said the person that called me was in support of it and he's pretty much a river person type. He said it wasn't exactly what he wanted but, the way I understood it, it would give some leeway to the lake authority, but in**

**turn for that leeway, it would give some guarantee to the down creek people also.** Charles said FERC will actually make that decision. The DEQ is involved in this too.

#### **Sub-committee Reports:**

Agriculture and Forestry: No report.

Municipal Interests and Permit Holders (MIPH):

Rivers: No report.

Water: No report

Lake Interests: No report.

#### **Future Meetings:**

- Mike McEvoy indicated that we have 2 possible meeting topics. John had brought up that the Corp Water Regulation Group has offered to have us down to Kerr Reservoir again. **Bob Conner mentioned that we put off on the bi-solids. What is the best time for that?** That's our other topic, because we had talked about doing a biosolids-kind of focused meeting. If you want to do it up in Roanoke, I had offered that we could do it at the Wastewater Plant there and then go out to one of the fields. We'll start land applying again in the end of April early May as well, so either of them will fit our time schedule. It's up to the committee's choice there. I think we could do either one. I will say that there is a bio-solids study ongoing state-wide and it's supposed to be a 2-year process. They just finished their 1<sup>st</sup> year, essentially submitted a work plan to the legislature which is their interim report and then they have a final report which is due next November. So, in the event that we wanted to make some kind of statement or send them some information about our feelings on bio-solids there's certainly plenty of time to do that in the upcoming months. **Charles Poindexter asked when the preliminary was due.** The preliminary report was done back in November, their 1<sup>st</sup>, and their final report's due next November. They kind of got a late start. I think they started meetings in June or July, so the fall was used to get organized for their work plan for this year. It's really the committee's choice, we could do either one. Travel down to Kerr Reservoir or go up to the Roanoke area and do bio-solids. **Bob Conner asked what's the best time with bio-solids?** Right now we're not land applying, so if you wanted to go out to a farm to see it happening, we'd have to wait 'til probably May. Or again, we land apply from May usually through November so, really any time in that time frame is reasonable. **Then we would still have time.** Yes. Do we want to do that? **John said fine with me. They offered to meet with us and discuss the allocation process and where that stands and probably get into the Inter-Basin Transfer issues by the time we would meet. So they offered it and I wasn't going to turn them out off hand but . . .** Bob Conner stated Mr. Chairman, for the sake of time, I move that we meet at Kerr Lake at a date set by our Greg and then at that time we consider meeting in Roanoke by next date. It was seconded. **Greg asked so should it be held in March or after the session where you come back for the veto session?** After the veto session. John and Greg will work out the details.
- The next meeting will be at Kerr Reservoir around mid-April. John Feild and Greg will work together to set a date and arrange the meeting.

#### **Adjournment**